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## Contents





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# MINNESOTA MEDICINE

*Journal of the Minnesota State Medical Association, Southern Minnesota Medical Association, Northern Minnesota Medical Association, Minnesota Academy of Medicine and Minneapolis Surgical Society*

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## THE USE AND ABUSE OF THE SULFONAMIDES


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BECAUSE we learn largely through experience, and profit particularly from our past mistakes, I think that it is worth while to discuss some of the errors of sulfonamide therapy which experience has shown that it is possible to avoid. Mistakes in this field may be roughly grouped into three main classes: (1) those concerned with choice of a drug or selection of a disease for treatment, (2) those concerned with dosage of the drug and (3) those concerned with toxicity of the drug (the most important group).

Mistakes in the first group usually are due to selection of a drug which is unsuited for the infection to be treated. Thus, it is an error to use sulfanilamide, which is largely effective against beta hemolytic streptococci, for treatment of infections produced by pneumococci or staphylococci. Sulfanilamide is also unsuited for treatment of infections produced by unknown organisms, because these infections may be caused by pneumococci or staphylococci. For staphyloccocic infections sulfathiazole seems the preferable drug, although sulfapyridine or sulfadiazine can be used. For pneumococcic infections, sulfathiazole, in general, probably has some preference over sulfapyridine because of its lower toxicity and, by the same virtue, sulfadiazine has some preference over sulfathiazole. Sulfadiazine, sulfapyridine or sulfathiazole can be used for treatment of infections of unknown cause, for each is effective for beta hemolytic streptococci as well as pneumococci and staphylococci. Errors in this first group also occur when an attempt is made to use a sulfonamide drug against diseases which experience has shown fail to respond to such treatment. Among some of the diseases of this type are chronic infectious arthritis, acute rheumatic fever, tularemia and various virus infections, including the common cold.

Errors in the field of drug dosage are equally serious, whether they are due to the giving of too much drug or too little drug. We are likely to forget in treating mild infections, and particularly infections involving the urinary tract, that amounts of a sulfonamide drug of as little as 2 to 3 gm. (30 to 45 grains) administered daily in divided doses to the adult person usually will give as satisfactory results as will larger doses. Unnecessary and large doses have the disadvantage that they may disturb the patient, and may do so to a degree that necessitates discontinuance of use of the drug before cure is effected. On the other hand, in infections of moderate severity such as pneumonia and of marked severity such as bacteremia and meningitis, it is necessary to use large doses of drug initially in order to obtain a sufficiently high concentration of the drug in the body to control the infection before organisms have multiplied excessively and before extensive foci of tissue destruction have been set up. In infections of moderate to marked severity, therefore, the effort should be made to obtain from the initial doses of the drug the concentration of drug desired, and then merely to maintain this concentration by subsequent daily doses of drug. This is in contrast to early methods, in which small initial doses of drug were given and the concentration was gradually raised by increasing daily doses of the drug as the patient's condition became increasingly worse from day to day.

Errors frequently are made in serious infections by waiting to complete every detail of the diagnostic pattern before treatment is started.

From the Division of Medicine, The Mayo Clinic, Rochester, Minnesota. Remarks made in the Symposium on Therapeutics at the annual meeting of the Minnesota State Medical Association, Duluth, Minnesota, June 30, 1942.

Thus, a delay of a day or two before starting treatment, while awaiting some laboratory report such as a blood culture may mean the difference between success and failure in a severe infection. In these conditions it is necessary also to continue to maintain the desired high concentration of drug in the body until complete recovery has occurred, for an appreciable decrease in this concentration may permit a relapse. Unfortunately, also, recurrences may ensue in severe infections if some amount of drug is not administered for as long as three weeks after the fever has subsided and clinical recovery has seemed to occur. The reason for this may be readily understood if the fact is borne in mind that use of the sulfonamides neither accelerates nor hinders the formation of antibodies and other immune processes, and therefore confers no special immunity to specific infections.

Errors associated with drug toxicity undoubtedly form the largest group of errors resulting from use of the sulfonamides. It seems to me that many of these mistakes probably could be eliminated at the outset if all patients were grouped prior to treatment so that sulfonamide treatment could be judged to be either an optional or an essential measure. In the classification in which sulfonamide therapy is considered to be optional, all infections should be included for which the ordinary prognosis is good and for which other satisfactory measures of treatment are available. Such diseases as gonorrhea and tonsilitis would thus be included in this group. When sulfonamide treatment is considered to be optional it is not justifiable to ignore evidences of moderate toxicity and to continue use of the drug when such symptoms occur. On the other hand, in severe infections, such as meningitis and bacteremia, the fact that the prognosis ordinarily is poor and the fact that sulfonamides usually are the sole reliable measures of treatment make the use of sulfonamide drugs an essential therapeutic measure; that is, essential if one is to hope for recovery. Under the latter circumstances, continued use of a sulfonamide drug is sometimes justified when toxic symptoms occur which would contraindicate its use if treatment were to be considered purely optional. Serious errors have been made all too frequently in the past when some patient who had mild disease, such as gonorrhea, continued to receive a sulfonamide drug in spite of recurring or persisting marked symptoms of headache, vertigo, nausea, anorexia and the like. These symptoms frequently precede more serious complications and necessitate discontinuance of sulfonamide when it is being used as an optional measure. The same is true of a cutaneous rash, which may terminate as exfoliative dermatitis. On the contrary, however, when sulfonamide treatment is considered essential, the drug under such conditions may continue to be administered with caution or a change may be made to another sulfonamide under close observation, because in such an instance sulfonamide treatment seems essential to recovery. Many errors will be avoided if all patients receiving appreciable amounts of a sulfonamide for a few days have blood counts at frequent intervals, as indicated by the condition of the patient and the previous value of the blood count. I am sure that all patients receiving sulfathiazole, sulfapyridine or sulfadiazine in appreciable amounts should have their urine examined daily and their intake and output of fluid carefully checked. Probably the majority of renal complications could be avoided if all patients receiving these drugs were treated according to a regimen which included a fluid intake of at least 3,000 c.c. and a urine output of 1,400 c.c. These drugs are practically entirely eliminated in the urine, and a high fluid balance of course allows a greater degree of dilution of drug with less opportunity for renal damage. Under these circumstances, also, when there is a decrease in the output of urine or when symptoms of renal colic or hematuria arise, it is possible to detect the disturbance at a time when the margin of safety is greater, because of the high output of urine, and use of the drug usually may be discontinued before serious renal damage occurs. In the final analysis, it seems to me that most errors concerned with drug toxicity occur from a lack of observation and a failure to detect toxic complications early and to heed them, rather than to a lack of knowledge of action of the drugs. Most of us have sufficient knowledge to enable us to use the sulfonamides intelligently, but most of us also have been guilty of contributing to the abuse of these drugs at some time because we have failed to detect or heed warnings of toxicity when they have occurred and have failed to discontinue the use of the sulfonamide when its further use was attended with unnecessary risk.

# HYPERSENSITIVITY TO THIAMINE HYDROCHLORIDE

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WITH the advent of parenteral administration of thiamine hydrochloride (vitamin $B_1$), there have appeared in the literature a number of untoward reactions. Of these reactions, some can be classified as toxic, while others have been true allergic reactions. During the past year, two cases of hypersensitivity to thiamine hydrochloride have been studied. They are presented here, together with a review of the literature dealing with unusual reactions to thiamine hydrochloride.

## Review of the Literature

Hecht and Weese[1] in 1937, were the first to demonstrate the lethal effect of massive doses of thiamine hydrochloride given intravenously in experimental animals.

In the same year, Perla[2] produced adverse effects on animals by giving excessive doses of thiamine hydrochloride.

In December, 1938, Steinberg[3] reported five cases of untoward effects resulting from the use of large doses of thiamine hydrochloride. However, of these five cases, only two are suggestive of true allergic reactions. Both of these patients experienced constriction of the throat and a fullness in the epigastrium almost immediately following intravenous administration. In addition, one of these patients developed nausea. In the three other cases reported, herpes zoster developed following intensive vitamin $B_1$ therapy. This was apparently a toxic reaction, and the resultant effect was an irritation of the peripheral nerve endings. This was the first report to suggest the possibility of allergic or toxic reactions to vitamin $B_1$ in humans. Unfortunately, in the above two suspected allergic reactions, neither intradermal nor passive transfer tests were carried out to establish an allergic etiology.

In May, 1941, Mills[4] reported a number of cases of unusual symptoms to thiamine hydrochloride, which he ascribed to thiamine overdosage. The nature of the symptoms do not suggest a development of hypersensitivity, but rather a true toxic reaction due to overdosage. These symptoms resembled those of overdosage with thyroid extract. They were: headache, increased irritability, insomnia, palpitation, rapid pulse, weakness, tremor, nausea and sometimes vomiting.

In July, 1941, Laws[5] reported a case in which the following symptoms occurred thirty minutes after the subcutaneous injection of thiamine hydrochloride: violent sneezing, edema of the lips and eyelids, the appearance of large urticarial wheels on the entire body, and a feeling of tightness in the chest. The patient then became very dyspneic and cyanotic, at which time audible wheezing was present. Symptoms were controlled by the subcutaneous administration of epinephrine hydrochloride. Intracutaneous and passive transfer tests were carried out in this case, both of which were positive.

About the same time, Stiles[6] reported two cases of apparent sensitivity to thiamine hydrochloride. Intracutaneous tests were positive. Passive transfer tests were not attempted in these cases. The symptoms in these cases, such as increased pulse rate, excessive nervousness, profuse perspiration, and a feeling of agitation and panic resembled very closely those described by Mills, which he ascribed to overdosage. The usual allergic or anaphylactic manifestations encountered after parenteral therapy were entirely missing. The symptoms in these two cases appear to be due to overdosage rather than a true hypersensitivity to vitamin $B_1$. Regardless of the positive intracutaneous tests obtained, the validity of the specificity of these positive tests must be questioned, since I have observed irritating qualities of thiamine hydrochloride on intracutaneous injections if very dilute solutions are not used.

In November, 1941, Schiff,[7] in discussing a paper by Joliffe on the use of parenteral vitamin therapy in neuropsychiatric disorders, reported a case of severe anaphylactic reaction following the intramuscular injection of 25 mgms. of thiamine hydrochloride. Previous to this injection, the patient had received fifty-seven intramuscular injections of thiamine hydrochloride. Within a minute or two after the fifty-eighth injection, the patient became nauseated and vomited, voided involuntarily, and collapsed. Respiration ceased and the patient became pulseless. With the aid

of immediate artificial respiration and intravenous epinephrine hydrochloride, the patient eventually recovered. After recovery, the patient stated that she had noted sneezing after the last three or four injections. Scratch tests in this case were strongly positive. Passive Transfer Tests were not carried out. In the same discussion, Mills[8] reported a case of sudden death following parenteral administration of thiamine hydrochloride. Autopsy in this case revealed multiple ecchymoses beneath the pia over both cerebral hemispheres, with areas of encephalomalacia and perivascular hemorrhage. The cause of death in the above case was undoubtedly an anaphylactic reaction.

In addition to the above reported cases, the following two cases have been observed by me within the past year:

## Report of Cases

*Case 1.*—E. R., white, male, aged twenty-four, with a diagnosis of peripheral neuritis, was placed on vitamin $B_1$ therapy. Both oral and parenteral therapy were jointly employed. The patient received his first injection in May, 1941, and received 25 mgms. parenterally every third day for ten doses. The patient showed a marked improvement and therapy was stopped.

Two months later, the patient's symptoms returned, and parenteral thiamine hydrochloride was again given. After the fourth subcutaneous injection, the patient complained of marked swelling and itching at the area of the previous injection. He stated that this occurred after the third injection, but was much milder. Parenteral therapy was immediately stopped and intradermal tests with the commercial vitamin $B_1$ were done, which were markedly positive. In fact, the patient complained of itching at site of the tests for twenty-four hours after the intradermal tests were done. On further testing with pure crystalline thiamine hydrochloride dissolved in an aqueous solution, the intradermal tests were again positive. The intradermal tests with the preservative contained in the commercial preparation were negative. Passive transfer tests were carried out on a number of persons, but they were all negative. The above illustrates a case of local anaphylaxis which involved the area of injection. Possibly if further parenteral therapy had been continued, a general anaphylactic reaction might have occurred. Subsequently, the patient continued to take thiamine hydrochloride orally without any adverse effects.

*Case 2.*—Miss D. B., white, female, aged thirty-one, first received subcutaneous thiamine hydrochloride in August, 1940. She received daily injections for twenty-four days during her hospital stay. After her release from the hospital, the patient continued to received injections at intervals of seven to ten days.

In June, 1941, after one year of continuous parenteral therapy, about five minutes after receiving a subcutaneous injection of vitamin $B_1$, the following symptoms appeared: angeoneurotic edema of tongue, lips and eyes, a peculiar fullness and itching of the ears, and violent sneezing. Her skin then became hot and itched unbearably. The symptoms disappeared fifteen to twenty minutes following subcutaneous epinephrine hydrochloride. The following week a similar but milder reaction resulted following a very minimal subcutaneous injection. The patient was then referred to me for possible hypersensitivity to thiamine hydrochloride. Intradermal tests to both commercial and aqueous solutions of thiamine hydrochloride crystals were strongly positive. Intradermal tests for the preservative used in the commercial preparation were negative. Passive transfer tests, however, were entirely negative. The patient subsequently continued to take thiamine hydrochloride orally without any adverse effects.

## Discussion

In analyzing the above two cases, there were a number of striking similarities.

Even after the allergic reaction appeared, both patients subsequently tolerated thiamine hydrochloride orally. Why these patients were able to tolerate vitamin $B_1$ orally, and yet showed definite allergic reactions to parenteral thiamine hydrochloride is hard to explain. One may theorize on the possibility of the existence of a rather high threshold of sensitivity to vitamin $B_1$ in these individuals and that the concentration of thiamine hydrochloride taken orally was never at a sufficiently high level at any one time to evoke an allergic reaction. An analagous situation exists in the normal intake of vitamin $B_1$ in the daily diet.

The immunological response shown was identical with that experienced with well-known sensitizing proteins such as horse serum. Normally, the latent or incubation period to produce sensitization does not exceed seven to ten days. As long as injections of thiamine hydrochloride were given at an interval of less than seven days, no constitutional reactions resulted, but when the interval exceeded one week, in both cases an anaphylactic reaction resulted. The clinical importance is evident in that the possibility of an allergic reaction following parenteral administration increases as the interval between injections is lengthened.

Another similarity present in both cases was the presence of positive intradermal tests and the absence of positive passive transfer tests. However, it has often been demonstrated that definite clinical sensitivity may exist even in the absence of demonstrable circulating antibodies.

This may be explained by the presence of serum of low antibody titre.

### Summary and Conclusions

1. A review of the literature of untoward reactions to thiamine hydrochloride has been made.
2. Reactions to thiamine hydrochloride have been both toxic and allergic in nature.
3. Five cases of apparent sensitivity to thiamine hydrochloride have thus far been reported.
4. Two more cases of thiamine hydrochloride sensitivity have been added to the literature.
5. With the definite establishment of the possibility of thiamine hydrochloride sensitivity, the skin testing of patients who are about to receive thiamine hydrochloride parenterally may be a wise precautionary measure, especially if previous administration has taken place.

Grateful acknowledgment is made to Dr. A. B. Litman and Dr. Alex Blumstein for making these cases available for study.

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## THE DIAGNOSIS AND TREATMENT OF LICHEN PLANUS

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LICHEN PLANUS in its usual form does not present a difficult diagnostic problem since the typical flat, angular, violaceous, waxy papules are readily recognized. More and more, however, dermatologists have come to recognize the multiplicity of clinical features the disease may present. There is a wide variation in the color and arrangement of the lesions in lichen planus; they may be atrophic or hypertrophic and subjective symptoms may be lacking or intense. The chief purpose of this discussion is to briefly review the more unusual types.

Those who have studied large series of cases of lichen planus such as Little,[21] White,[40] Culver,[8] and Jacob,[17] have noted that the extremities are the most common sites of involvement, that lesions occur on the trunk in about a third of the cases, on mucous surfaces in about 20 per cent, on the male genitals in about 25 per cent, and universally in about 20 per cent of the cases. The face, scalp, palms, soles, and perineum are involved only rarely. According to Culver[8] lichen planus occurs in less than 2 per cent of patients presenting themselves because of cutaneous disease. About 80 per cent of all cases occur between the ages of twenty and sixty, and the disease is extremely rare in children. Figures concerning the relative incidence in males and females vary among different observers.

The disease usually develops insidiously and follows a chronic course of months to years. It may remain quiescent for months after the original outbreak but is usually characterized by exacerbations and remissions. The occasional acute case may appear as an exanthem, even becoming generalized within one to a few days. The disease may disappear spontaneously but in most untreated cases tends to persist. Lord[22] reported four distinct recurrences of lichen planus in a series of thirty-three cases, which in his opinion gravitated against the prevailing impression that recurrences are extremely uncommon. In a general way it may be said that the prognosis is good if suitable treatment is carried out for a long enough period of time.

*Lichen Planus of Mucous Membranes.*—Although involvement of the mucous membranes in the ordinary type of lichen planus is not unusual, instances in which the disease is confined to the oral cavity are uncommon. Fox,[11] in 1931, described ten such cases and excellently discussed

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the frequency, diagnosis, duration, and response to treatment of this form of the disease.

The lesions, which as a rule were of several months' duration, were found on the buccal mucosa of the cheeks, usually opposite the interdental cleft. In some, the dorsum of the tongue, the upper lip, and the soft palate were affected.

The eruption consisted of superficial, grayish-white lesions in the form of minute puncta, linear streaks, circles and reticulated or solid areas. Although in most cases the lesions were smooth, there was slight roughness in a few.

Subjective symptoms, when present, consisted of a burning sensation or soreness. Since the subjective symptoms are so mild, lichen planus of the mouth is most important from the diagnostic standpoint since it is frequently mistaken for leukoplakia. Fox felt that in the differential diagnosis between lichen planus confined to the mouth and leukoplakia difficulty arose only in the early stages of the latter. Lichen planus does not affect the commissures to any great degree whereas in leukoplakia this is a favorite location. Lesions in the form of fine dots, circles, or reticulated areas are not characteristic of leukoplakia. In contrast to the latter, erosions or ulcerated areas are almost always absent in lichen planus. Histologic examination is an additional aid in diagnosis.

Lichen planus of the lips is also a rarity. The lower lip is more commonly affected and as a rule is accompanied by lichen planus of the buccal mucosa. Douglass Montgomery,[27] who reported ten cases in 1938, stated that the clinical appearance of the lesions on the lips resembled that in the mouth, i.e. stripes, rings, stars, lacework and dots shining through the upper layers of the epithelium. Montgomery also mentioned that lichen planus of the lips may appear as a cheilitis with erosions, purulent discharge and tightly adherent crusts.

Reports concerning lichen planus of the conjunctivæ are extremely rare. Gaucher and Druelle,[18] in 1904, referred to lesions on the lower palpebral conjunctivæ as part of an extensive lichen planus. In 1924, Luhr[23] reported a case of generalized lichen planus in which the bulbar conjunctivæ showed several sago-like bodies. I have had the opportunity to observe one case of the disease in which there were lesions on the bulbar conjunctivæ and on the margin of the lower lid of the left eye.

Lesions of lichen planus similar to those occurring on other mucous membranes are seen rarely on the nasal mucosa.

The description of the eruption in the mouth may also be applied to that occurring on the mucosa of the female genitals. In many cases there is simultaneous involvement of the mouth and vulva. The question of atrophic lichen planus of the vulva and lichen sclerosus et atrophicus of this region will be discussed later.

Lichen planus of the male genitals usually gives rise to no diagnostic confusion. Culver found that the penis was affected in 25 per cent of 148 cases, the eruption appearing as grouped or isolated papules, rings or reticulated areas. Similar lesions may be present, though less frequently, about the anus and perineum.

*Annular Lichen Planus.* Annular lesions in lichen planus occur in about 10 per cent of cases according to Little,[21] ranking second in frequency only to the hypertrophic variety. Little believed that annular lesions developed from a large single papule which cleared in the center rather than from a group of smaller papules. It has been shown since, however, that such lesions may develop in either way.

*Linear Lichen Planus.*—The well-known tendency of lichen planus papules to appear in lines may be exaggerated to form this type. Little noted that linear lichen planus appeared most commonly in children. Linear lesions may occur either on the trunk or extremities. None of the theories which have been advanced to account for the occurrence of eruptions in linear arrangements are entirely satisfactory. Hypotheses concerning distribution along the course of blood or lymph vessels, nerves, Voight's lines or dermatomeres, do not explain all cases of linear eruptions. Senear and Caro[34] after carefully studying these various theories stated that at present the most acceptable hypothesis is the concept of the existence in the skin of zones of increased irritability (fragile zones) probably determined congenitally by various factors.

Concomitant and histopathologic findings permit the differentiation of linear lichen planus from nevus unius lateralis, linear psoriasis, and lichen striatus. The latter presents as a linear, lichenoid, papular eruption occurring as a rule in children unilaterally on an upper extremity.

In an excellent paper, Senear and Caro[34] recently discussed this condition and stated that it warranted a place as a distinct entity. The onset is usually sudden and involution with or without therapy is the rule within a few weeks to several months. The histologic picture is that of a chronic lichenified dermatitis rather than of lichen planus or psoriasis.

*Hypertrophic (Verrucous) Lichen Planus.*—This is the most common of all the special varieties of lichen planus. Hypertrophic lesions occur most frequently on the lower extremities, occasionally the upper, in cases of long standing in which the papules have lost many of their ordinary characteristics and have formed thickened, warty, elevated plaques. Such patches may be rounded, elongated or irregular and are reddish-brown or purple in color. The surface is scaly, rough and verrucous and may be excoriated since the accompanying pruritus is usually intense. Areas of pigmentation may be interspersed between the hypertrophic plaques. The term lichen planus obtusus has been applied to a type of the disease characterized by round or oval, flat or convex, rough, warty papules of large size (pea to bean or larger) occurring chiefly on the extremities with or without ordinary lesions.

Cases of lichen planus in which the palms and soles are involved may present lesions which resemble verrucæ and which are usually yellow in color rather than violaceous. In most cases the palms and soles are affected as part of a generalized eruption but in certain cases, such as that of Weber and Rattner,[39] the lesions may be limited to those areas.

Lieberthal,[20] in 1916, described another unusual form of hypertrophic lichen planus which he called the shin-guard type or lichen planus ocreaformis. In this case there were pinhead to bean sized, angular, flat and convex firm papules on both tibial regions. Some of the yellowish-brown lesions were smooth while others were rough and scaly. The plaque in its entirety resembled a "coblestone pavement." There were lesions on the mucosa of the cheek which suggested lichen planus and the histopathologic findings fitted such a diagnosis.

*Vesicular and Bullous Lichen Planus.*—Vesicles at the tops of the papules as well as bullæ occur in some cases of lichen planus. In 1933 Strauss[36] found seventy-eight examples of this type in the literature and reported three of his own cases. The vesicles varied in size from that of a pinhead to a hen's egg and from 1 to 200 in number. A relationship to the age of the patient could not be established. In six cases vesicles preceded the typical papular manifestations of the disease. Through the courtesy of Dr. Henry Michelson I recently observed a female, aged thirty-three, whose first lesions were multiple bullæ 1 to 2 cm. in diameter arising from a noninflammatory base. The eruption was generalized, although the mucosæ were unaffected. At the beginning the eruption was regarded as that of pemphigus but within a few weeks typical lichen planus papules were noted as the bullæ disappeared.

Vesicles and bullæ in lichen planus may occur on any area including the mucosæ, although they are more frequent on the dependent lower extremities. It has been stated that this type of the disease is more common in patients who have taken arsenic. Strauss, however, cited many cases in patients who had never received such medication. Eosinophilia was present in 10 per cent of the eighty-one cases and Nikolsky's sign was positive in two.

Although lichen planus is usually dry on the surface, edema is a distinctive and early characteristic of the pathologic process. An unusual amount of edema in certain cases offers an explanation of the vesicular and bullous types of the disease.

*Lichen Ruber Moniliformis.*—(Morbus Moniliformis Lichenoides—Wise and Rein) Until the paper by Wise and Rein[41] on this subject in 1936, it was generally believed that lichen ruber moniliformis was a variety of lichen planus. This dermatosis was originally described by Kaposi in 1886 and up to 1936 sixteen additional cases were reported under the same title. The outstanding feature of Kaposi's case was a striking and bizarre arrangement of waxy papules, nodules and keloid-like elongated strands forming parallel ridges chiefly in the neck and flexor surfaces of the arms and legs and disposed in conspicuous vertical rows corresponding to the long axes of the neck and extremities. The eruption resembled strings of pearls or coral beads. Many vertical linear lesions were also present on the abdomen, back and buttocks and there were papules in retiform arrangement on the thighs.

In other areas such as the chest, abdomen and back, there were numerous small, firm, slightly elevated, glistening brownish-red papules some of which were depressed centrally. Pigmented spots were interspersed among the papules. There were no excoriations. Although the genitals were free, flat papular lesions were seen on the labial mucosa and there was an adherent grayish-yellow membrane on the buccal mucosa.

Following a thorough study of the literature and their own case, Wise and Rein concluded that lichen ruber moniliformis was entirely unrelated to lichen planus. In many biopsies there were no changes which would lead one to link the pathologic picture with that disease.

*Lichen planus of the Eyelids.*—A review of the voluminous literature on lichen planus indicates that lesions on the eyelids are extremely rare. In 1938 Michelson and I[20] reported five such cases. We observed three types of lesions on the lids: (1) the ordinary lilac colored, slightly delled, shiny papules; (2) papules arranged to form annular lesions such as are frequently seen on the glans penis; and (3) sepia brown, retiform pigmentation simulating erythema ab igne and similar to the melanotic staining seen in certain patients with lichen planus in the late stages of regression. In one case of this type the histopathologic findings were characteristic for lichen planus. Lesions on the lids may or may not be accompanied by efflorescences on other parts of the body.

*Lichen Planus of the Nails.*—Involvement of the nails in lichen planus is rare. Pardo-Costello[32] stated that, in extensive cases of the disease and in chronic types involving the extremities, paronychias, dystrophies similar to those found in other dermatoses and transverse or longitudinal striations may be seen. As a rule all of the nails are not affected. Little[21] described pitting of the nails in lichen planus similar to that found in psoriasis, as well as longitudinal flutings. Lewis and Ricchiuti[19] recently described a case of lichen planus of the nail bed and reviewed seven others in the literature affecting one or several nails. Their patient had lichen planus on the legs, arms and glans penis. Later a violaceous papule appeared on the nail bed of the left thumb within the lunula and grew to occupy about a third of the nail. The nail plate over it became thinned, and that portion of the plate distal to the lesion showed longitudinal striæ. The lesion responded to x-rays. The author mentioned roughness of the nails, subungual hyperkeratosis, thickening, thinning, brittleness or fragility, yellow or yellowish-gray color, opacity and shedding as occurring in lichen planus. Koilyonychia has been noted following lichen planus. Although Heller[14] believed that thickening, increased fragility, yellowishness and opaqueness are characteristic nail changes in lichen planus, Lewis and Ricchiuti agreed with Jadassohn[18] that such dystrophic changes are purely coincidental in many instances and not pathognomonic for that disease.

*Lichen Planus Erythematosus.*—This unusual type of lichen planus was originally described by Crocker[7] and later discussed by Freeman[12] in 1926. The lesions are a deep crimson, soft to the touch, and can be temporarily obliterated by pressure. In one of Crocker's cases the eruption was limited to the grain and abdomen while Freeman's case presented soft, smooth, cherry to violaceous colored papules arranged in a retiform manner resembling cutis marmorata on the flexor aspects of the forearms. The histologic picture was that of lichen planus with epidermal atrophy.

*Follicular Lichen Planus and Lichen Planus et Acuminatus Atrophicans.*—Follicular lesions in lichen planus may occur on the trunk or extremities in conjunction with the ordinary flat-topped papules. The follicular lesions are usually brown or yellowish-brown in color, non-inflammatory, horny, acuminate, and impart a "nutmeg grater" feel to the affected skin. When acuminate papules occur with typical lesions of lichen planus the diagnosis is not difficult but in the absence of these an eruption of horny, acuminate papules offers great difficulties in diagnosis, since keratosis pilaris, keratosis, follicularis, phrynoderma and pityriasis rubra pilaris come into consideration. Lichen planopilaris[31] is the term which Pringle applied to this form of lichen planus in which the ordinary lesions are accompanied or followed by an eruption of follicular papules indistinguishable from those of lichen spinulosis. Adamson,[1] in his classic description of lichen spinulosis, defined that disease as one occurring chiefly in children, and characterized by horny,

filiform papules distributed symmetrically over the trunk and extremities, said that its occurrence in an adult means lichen planus.

Combes and Bluefarb[5] recently reported an example of a follicular type of lichen planus which they termed "lichen planus follicularis circumscriptus." The lesions occurred in well marginated patches on the arms, thighs, and legs and were made up of miliary red papules which under magnification were follicular, angular, scaly and nonconfluent. The sites of previous lesions were marked by a well-defined, milk-white area of atrophy 2 to 5 mm. in diameter. There was neither pigmentation, follicular plugging nor punctate pitting. Histologic examination showed the picture of lichen planus with atrophy.

In 1922 Feldman[10] reported a case under the title of lichen planus et acuminatus atrophicans. The patient was a forty-five-year-old woman who had lesions of lichen planus on the arms, face, neck and trunk which left brown, pigmented areas after involution. These areas later became depigmented and atrophic. Interspersed among the ordinary lesions of lichen planus were hemispherical, pink or red, acuminate papules each having a yellowish-brown to almost black horny plug. Cases similar to Feldman's had been previously reported as "folliculitis decalvans et atrophicans" or "folliculitis decalvans et lichen spinulosis" by Little, Dore, Beatty and Ormsby. These cases differed from Feldman's to the extent that there were no typical papules of lichen planus and the patients showed areas of alopecia and atrophy on the scalp. There were, however, no follicular pustules on the scalp, a finding which is essential for a diagnosis of folliculitis decalvans according to Quinquaud, who originally described that disease. Ormsby's patient showed an atrophic area in front of the left ear similar to the lesions on the scalp. Since the ear region is nonhairy the atrophy could not be accounted for on the basis of folliculitis decalvans. In 1921, Little presented a case in which there were atrophic areas on the scalp, lichen spinulosis-like lesions on the body and a scattering or ordinary lichen planus papules on the body and lesions on the tongue and buccal mucosa which were variously diagnosed as lichen planus or leukoplakia. In 1936[10] Feldman reported two more cases, each of which had atrophic, bald patches on the scalp, discrete and grouped, acuminate, follicular, plugged papules on the body as well as unmistakable lesions of lichen planus. Feldman felt that this syndrome in its entirety should be considered as a type of atrophic lichen planus rather than folliculitis decalvans plus lichen spinulosis. For further details reference may be made to Feldman's publications and a recent article on the subject by Ellis and Kirby-Smith.[9]

*Atrophic Lichen Planus; Lichen Sclerosus et Atrophicus.*—Perhaps the most confused aspect of lichen planus is its possible relationship to lichen sclerosus et atrophicus. The entire subject of atrophic lichen planus, lichen sclerosus et atrophicus, lichenoid scleroderma, and kraurosis vulvæ is viewed differently by leading dermatologists at the present time. It is not within the scope of this paper to go into these differences of opinion in detail and reference to the subject may be made from other sources such as the papers by Nomland[29] and Montgomery and Hill.[28]

In brief, most observers agree that lichen sclerosus et atrophicus, lichen albus of von Zumbusch and chronic atrophic lichenoid dermatitis of Csillag are the same disease. Furthermore, there is little question that lichenoid or guttate types of morphea exist which can be distinguished histologically at least from lichen sclerosus et atrophicus. The moot point is whether or not lichen sclerosus et atrophicus is a form of atrophic lichen planus. It is my present belief that Nomland and Montgomery and Hill are correct in their opinion that lichen sclerosus et atrophicus is a distinct entity and can be distinguished in most cases clinically and especially pathologically from atrophic lichen planus on the one hand and morphea guttata on the other.

The characteristic lesion of lichen sclerosus et atrophicus is an irregular, often polygonal flat topped papule, presenting an ivory or mother-of-pearl color which is striking. The papules may be discrete, or coalesce to form plaques, but in most cases both types of lesions are present. Delling and follicular plugging is regarded as an important diagnostic aid. When the lesions occur on the female genitals they coalesce to form plaques which simulate kraurosis vulvæ. According to Montgomery and Hill the atrophic lesions in kraurosis vulvæ do not extend beyond the inner aspects of the labia majora and merge gradually with the normal skin while the sharply defined plaques of lichen sclerosus et atroph-

icus extend onto the thighs and perianal region. The individual papules may be seen in lichen sclerosus et atrophicus. The diagnosis of the latter disease depends upon the recognition of these typical white papules together with correlation with histopathologic observations. Hunt[16] in discussing the subject linked kraurosis vulvæ with lichen sclerosus et atrophicus, associating both with atrophic lichen planus. I do not share this view.

True atrophic lichen planus is extremely uncommon. A good example of this type of the disease was the case which Nomland[29] reported in 1930. The eruption involved the scalp, face, arms, legs, and body. Most of the lesions were from 0.5 to 1.5 cm. in diameter and appeared as brown, atrophic, finely wrinkled, depressed macules, many of which had a narrow elevated violaceous shiny margin. There were a few typical papules of lichen planus on the skin and white lines and dots in the mouth. There was an atrophic bald area without pigmentation on the scalp.

Montgomery believes that even though atrophic forms of lichen planus may simulate lichen sclerosus et atrophicus, other more characteristic lesions of lichen planus are usually found on the skin or musosæ. Dermatologists whom I have questioned cannot recall seeing typical lesions of lichen planus together with the ivory-white lesions of lichen sclerosus in which adequate histopathologic studies were done. Montgomery, however, has seen cases of atrophic lichen planus which somewhat resembled lichen sclerosus clinically but which histologically were lichen planus.

*Lichen Planus-Like Drug Eruptions.*—From time to time eruptions closely simulating or indistinguishable from lichen planus have been observed following injections of the arsphenamines or gold salts. In 1921 Buschke and Freymann[4] reported two cases of lichen planus-like eruptions occurring after arsphenamine therapy. In one, the clinical features were those of lichen planus while the histopathologic findings were nonspecific and in the second the reverse was true. McCafferty[24] and Ahlswede[2] wrote articles on the subject in the American literature. McCafferty's case, which occurred during antisyphilitic therapy, was completely indistinguishable clinically and histologically from true lichen planus. There were typical lesions of lichen planus in the mouth.

Similar cases following gold therapy are exemplified by those of Pautrier and Roederer[33] and Traub.[38] The case of Pautrier and Roederer showed an admixture of ordinary and verrucous lesions of lichen planus. There was also involvement of the buccal mucosa. Traub's patient had lichen planus eight years previously but had recovered and remained well until she received gold therapy for arthritis. After two or three injections a generalized eruption appeared which was said to be rather typical of lichen planus both clinically and histologically.

Those who have discussed this topic have considered the following three possibilities:

1. The eruptions following arsphenamine and gold are true lichen planus and appear purely coincidentally.

2. The eruptions are true dermatitis medicamentosa merely simulting lichen planus.

3. The eruptions are true lichen planus, a disease which can be precipitated by diverse factors including drugs.

Ahlswede stressed the constitution or disposition of the patient and felt that drugs could act as a trigger mechanism to provoke lichen planus in a specially reactive type of skin. He compared such an occurrence to "seborrheic-like" syphilitic eruptions occurring in individuals with an oily skin. In discussion of Traub's case Sachs expressed a similar opinion. Peck, however, stated that Satenstein believed that lichen planus-like eruptions due to drugs could be differentiated from true lichen planus because of the increased depth of the infiltrate in the former. The question of coincidence is also raised by Traub's case since the patient had an attack of lichen planus previously. Further study of these eruptions is necessary before final conclusions can be drawn. The important point is that lesions identical to those of ordinary lichen planus can appear following the injection of the arsphenamines or gold salts.

## Histopathology

Lichen planus presents a characteristic histologic picture consisting of an increase in the stratum corneum and stratum granulosum with varying degree of acanthosis. There is pronounced vacuolization and necrosis of the basal cell layer and a dense lymphocytic infiltrate in the upper

portions of the cutis. According to Nomland[29] and to Montgomery and Hill[28] this infiltrate persists even in the atrophic forms when the epidermis becomes decidedly thinned. The findings in lichen planus of mucous membranes is similar to that of lesions on the skin.

In vesicular and bullous lichen planus the vesicles or bullæ are usually subepidermal but may be intradermal. Subepidermal spaces were considered by Joseph as a distinctive characteristic of lichen planus and are frequently seen in microscopic sections even when there is no macroscopic vesiculation. These lacunæ are the result of a tearing-away process of the lower portion of the rete by edema. In fact there may be total liquefaction degeneration of cells in this area leaving epithelial chasms. In vesicular cases this process is apparently intensified and an outpouring of serum results in the formation of bullæ. Subepidermal lacunæ are more common which parallels the occurrence of real vesicles in this location.

In well-developed lichen sclerosus et atrophicus the histologic picture does not resemble that of lichen planus. In the former there is hyperkeratosis with hyperkeratotic plugging of the follicles, and atrophy of the rest of the epidermis with flattening and loss of the rete ridges. In the upper portion of the cutis there is a clear-cut zone of homogenization. Directly beneath this zone there is an infiltrate of varying degree which may in certain cases appear in a band-like formation. Darier assumed that in lichen sclerosus the original infiltrate characteristic of lichen planus had disappeared leaving behind sclerosis and atrophy. Montgomery and Hill,[16] however, disagreed with this and could find no changes consistent with a diagnosis of lichen planus even in sections from the earliest lesions of lichen sclerosus et atrophicus.

## Treatment

The statement that the more cases of lichen planus which one treats the less he knows concerning the preferable treatment has been made by many dermatologists. Certain cases prove difficult to manage despite the use of all modern therapeutic measures, including x-ray therapy fortified with arsenical, mercurial and bismuth salts. Since we lack knowledge of the cause of lichen planus treatment is necessarily empiric.

In discussions concerning therapy mention is frequently made of a general régime consisting of regulated physical rest, relaxation of endeavor, changes of environment and respite from worries and uncertainties. The urgency for these measures of course depends upon the neuropsychic state of the individual patient but by most patients who are being treated in the office such advice is as a rule followed in a half-hearted, slipshod manner.

Ordinary bathing can be carried out as desired since it usually does not aggravate the disease. Soothing, tepid, colloid baths, employing corn starch, soda or oatmeal gruel, are helpful in some cases of widespread lichen planus characterized by intense pruritus.

No undisputed facts are known concerning the diet in lichen planus although some authors advise the exclusion of alcohol, tea, coffee, spices, fats, and oils. In my own practice I do not carry out any dietary regulation.

Burgess[3] recently reported favorable results in the treatment of fifteen cases of lichen planus with vitamin B complex. In his series the response was especially good in acute cases, the medication exerting at times what he termed an almost specific effect. The response was much slower in chronic and hypertrophic varieties. Attempts to ascertain the possible value of individual constituents of the B complex did not show any therapeutic specificity and Burgess felt that the entire complex should be used in the treatment of lichen planus.

Opinions vary greatly as to the relative merits of arsenic mercury and bismuth. Oppenheim[30] believes that arsenic is most effective, Little preferred enesol (a combination of arsenic and mercury), Sonck praised bismuth, while Toomey[37] stated that mercury is the "sheet anchor" in the treatment.

The latter believed that arsenic was contraindicated in acute lichen planus and that arsenical preparations given by injection (sodium cacodylate) had no therapeutic advantage over those given by mouth (Fowler's solution). He advised Fowler's solution in doses of 2 or 3 drops twice daily, increasing according to tolerance to not more than 12 drops daily. The drug was to be administered in courses as follows: first course three to four weeks with a rest period of five to ten days; second course two to three weeks with a rest period of two weeks; third

course two weeks. The solution was not to be given more than three months out of every ten-to-twelve-month period.

Oppenheim praises sodium cacodylate, administering the drug daily in acute cases in doses of 0.2 gm. intramuscularly up to thirty injections. If the patient complains of tasting or smelling garlic the medication is discontinued. In chronic cases Oppenheim prefers Fowler's solution or Asiatic pills.

Huffschmidt stated that fairly good results were obtained in the cutaneous but not the mucosal lesions of lichen planus by means of stovarsol. There were occasional flare-ups following the drug and there seemed to be no protection against recurrences. Stovarsol may be administered in the following way: 0.25 gm. tablets are given on an empty stomach one-half hour before breakfast. As many tablets are given in a course as the patient weighs in kilograms.

From a study of twenty-five cases, Conrad, Conrad, Mapother and Weiss[6] recently recommended bismuth arsphenamine sulfonate (bismarsen) in the treatment of lichen planus and suggested that it might be especially useful in those cases with mucous membrane involvement. The drug was given intramuscularly in doses of 0.1 gm. twice weekly along with large doses of vitamin C. There were three cases of stomatitis, several cases of puffiness of the eyelids and three cutaneous reactions to the arsenical in the series. Some patients were improved after five or six injections and apparently cured after fifteen or twenty injections while in the more chronic cases the number of injections had to be increased.

The arsphenamines have been employed by a number of dermatologists with indifferent results. Due to their toxicity they should not be used routinely in lichen planus.

Sonck[35] was favorably impressed with bismuth in lichen planus stating that it was cheaper than arsphenamine, more convenient and safer. Improvement sometimes appears slowly and some cases prove resistant. Sonck presented the following statistics concerning comparative treatments for lichen planus:

| | No. of pts. | Recovered | Improved | No result |
|---|---|---|---|---|
| X-rays | 73 | 42.5 | 35.4 | 21.9 |
| Bismuth | 29 | 38 | 41.4 | 20.7 |
| Arsphenamine | 17 | 29.4 | 41.2 | 29.4 |

Without doubt discussion concerning the relative merits of irradiation, mercury, arsenic and bismuth will continue for a long time.

Most authors praise mercury although there is wide divergence of opinion concerning the most useful preparation. It is quite well agreed that the mercurials are better given by injection than by mouth since by the latter route they are more uncertain, less efficient and sometimes irritating to the gastro-intestinal trace. Toomey thought that the best results were obtained when patients were treated just short of thorough mercurialization. It was also his opinion that the insoluble mercury salicylate in oil was preferable to the soluble salts such as mercury bichloride or cyanide. There is considerable difference of opinion on this point however. Bichloride of mercury is usually given daily in doses of 1/12 grain, and the salicylate once or twice weekly in doses of 1.5 grains. The salicylate is prepared as a 10 per cent suspension in a nonmineral oil. Little[21] favored mercury salicyl arsenate (enesol) giving 2 c.c. of the drug intramuscularly every second day over a period of six weeks.

Toomey[37] noted that in some cases ultraviolet irradiation seemed to hasten the resorption of the lesions. Oppenheim also feels that such treatment is of value.

Although x-rays are widely used in the treatment of lichen planus and must be regarded as one of our most useful therapeutic agents, the response varies in individual cases and patients are frequently encountered whose eruptions have failed to respond to proper safe doses. In some instances, even after certain lesions have begun to involute following irradiation, new lesions continue to appear during active therapy. In general the acute and subacute varieties of lichen planus involute within six to twelve weeks of fractional x-ray therapy. Hypertrophic plaques are notably resistant to x-rays as well as other types of treatment. Paravertebral roentgen therapy has also been used in the treatment of lichen planus. For details reference may be made to MacKee's textbook.

Radium is less useful than x-rays but is sometimes of value especially in mucosal lesions.

Three other physical therapeutic agents merit mention in the treatment of hypertrophic plaques: solid carbon dioxide, the actual cautery and electrodesiccation. Such agents are worthy

of trial when other measures have failed to produce a satisfactory result.

Local applications do little more than help relieve pruritus. I usually employ an antipruritic lotion containing 0.5 per cent camphor, 1 per cent phenol and 2 to 10 per cent liquor carbonis detergens.

In summary it may be repeated that lichen planus is a difficult disease to treat and that the wide divergence of opinion concerning the relative merits of various therapeutic agents signifies that no one or combination is entirely satisfactory.

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# INFECTIOUS MONONUCLEOSIS

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IN 1927, Davidsohn found that the serum of individuals who had serum disease contained a high titer of anti-sheep red cell agglutinins and hemolysins. Paul and Bunnell, in checking his results a few years later, discovered that four of their patients afflicted with infectious mononucleosis also showed the same reaction. Later Bunnell demonstrated the presence of a high titer of agglutinins for sheep erythrocytes in fifteen cases of infectious mononucleosis, and in twenty-two cases of serum disease.

The blood serum of many normal individuals will clump sheep erythrocytes, but only in very low dilutions. This particular ability of normal serum is accentuated after the injection of horse serum because of an increase in the amount of hemolysins and agglutinins. Thus these antibodies are reacting with an antigen (sheep erythrocytes) which had no part in stimulating their development. They are therefore called

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heterophilic antibodies. Some heterophilic antibodies may be specifically removed from human or animal serum by an extraction process in which the tissues of various animals (guinea pig, horse, chicken and others) are used. This group of antibodies are those found in the serum of individuals having serum sickness, while those of the patient having infectious mononucleosis which do not show the same extractable characteristic, fall into another group. This distinguishable characteristic affords an important diagnostic laboratory procedure in dealing with infectious mononucleosis.

Another and equally important diagnostic aid in dealing with infectious mononucleosis is the proper study of serial blood smears. Characteristic monocytes as described by Downey and McKinley occur fairly early in the disease. An experienced hematologist who recognizes this "atypical monocyte" contributes greatly in arriving at the diagnosis of infectious mononucleosis.

Thus we have two very important and essential means of making the diagnosis of this condition, in the laboratory. Which is of the greater importance cannot be stated, but it can be said that both should be used. The clinical means of diagnosis is altogether too uncertain because of the protean manifestations of the disease.

The following case is an example of one in which the diagnosis was made first by the hematological picture and was later confirmed by the serological findings. The latter test was of no help early in the disease as it showed a negative response.

## Case Report

A housewife, twenty-five years of age, was admitted to the hospital on November 11, 1941. She first became ill two evenings before, when she began to have chills, aches, and pains, associated with marked fatigue. On the following day her temperature was 101. During the next two days and nights she continued to have an intermittent fever which was worse in the mornings. She became very nauseated, but had severe, "hunger pains."

Physical examination showed a well-developed and well-nourished white female who was lying in bed, but appeared to be very uncomfortable whenever she tried to move. The conjunctivæ had a slight yellowish tinge. There was a moderate injection of the pharynx and the tonsils had been removed previously. The lymph nodes in the posterior cervical region were palpable and very tender. A systolic murmur at the apex of the heart was found, but was not transmitted. The heart was not enlarged. The heart rate was 100, and the blood pressure 102/48.

There was slight tenderness to pressure in the right upper quadrant of the abdomen just to the right of the epigastrium. The lower portion of the liver was not palpable.

The neurological examination was negative.

*Hospital Course.*—The patient was very ill for three weeks. Each night the temperature rose to 102 to 103 degrees and dropped to normal early in the morning. Chills and sweats followed each temperature elevation and these were followed by a period of marked prostration.

On November 15 the liver was found to be enlarged. The lower border was palpated 3 cm. below the costal margin.

Each afternoon she complained of a severe frontal headache which was relieved by ten grains of aspirin.

At the end of the first week of hospitalization a dry persistant cough occurred. This lasted until the third week of illness.

The spleen was palpable on November 20. The patient was not able to take fluids or food because of nausea. Five per cent dextrose solution in normal saline was given daily for seven days.

On December 6, the temperature remained at a normal level and a very rapid convalescence started. She was discharged from the hospital on December 9.

The treatment was entirely symptomatic. Vitamin B complex was given intramuscularly during the period of vomiting and dehydration.

*Laboratory.*—Blood culture, Wassermann, stool cultures, Mantoux, agglutination tests for typhoid and melintensis were all negative. The sedimentation rate was 21 mm. The throat culture was positive for Streptococcus viridans. Roentgenogram of the chest was normal.

The blood study and leukocyte counts are summarized in the accompanying table. This table also indicates the heterophile titer on two occasions.

| Day | W.B.C. | Neut. | Lymphocytes | Monocytes | Atypical Monocyte | Heterophile Titer |
|---|---|---|---|---|---|---|
| 1 | 8,200 | 54% | 29% | 13% | 0% | 1-8 |
| 2 | 5,150 | 47 | 28 | 20 | 1 | |
| 3 | 6,000 | 47 | 36 | 14 | 0 | |
| 4 | 5,700 | 55 | 35 | 8 | 0 | |
| 5 | 6,750 | 40 | 39 | 12 | 0 | |
| 6 | 9,250 | 44 | 39 | 13 | 0 | |
| 8 | 13,700 | 22 | 17 | 4 | 54 | |
| 12 | 7,450 | 17 | 20 | 2 | 59 | 1-128 |
| 18 | 8,400 | 17 | 58 | 2 | 23 | |

## Comment

This case was a diagnostic problem throughout the first two weeks of the illness. The symptoms, both objective and subjective, resembled those of endocarditis, typhoid, undulant fever, acute cholecystitis and infectious mononucleosis. The heterophile negativity during the first week clouded the picture considerably. Until the appearance of the atypical monocyte in large numbers, considerable confusion as to the proper handling of the case existed.

## Conclusion

1. A negative heterophile reaction should not eliminate the diagnosis of infectious mononucleosis early in the course of the illness.

2. The hematological findings were of the utmost importance in this case.

3. One should bear in mind that jaundice often occurs in this disease. Perhaps some individuals who have a transient mild attack of jaundice are unrecognized cases of infectious mononucleosis.

4. The correct diagnosis will prevent much unnecessary treatment.

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# MYASTHENIA GRAVIS


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IN reporting on this interesting, though not uncommon, condition we are confronted with the relatively few cases reported and the paucity of material upon the subject that appears in medical texts. Since Wilkes, in 1877, first reported this syndrome, about three hundred cases have been reported. In books, both on general medicine and on ophthalmology, from one to three paragraphs are usually given to this disease.

The purpose of the authors of this paper is to bring the attention of practicing physicians to this disease and to a diagnostic aid which seems to be quite specific. We will also discuss the therapy of the disease without going too much into detail as to its physiology and pathology.

The word myasthenia gravis means "severe muscular weakness." Jolly, in 1895, described the syndrome as a weakness fatigue and sometimes actual wasting of the muscles without any pathologic changes that were demonstrable microscopically. In patients suffering from this disease, repetition of movement quickly induces fatigue. While any of the voluntary muscles of the body may be affected, it tends to affect the muscles which are used most commonly and one might also say the voluntary muscles which are used involuntarily. We refer to the extraocular muscles, the muscles of the face, and the muscles of deglutition and speaking. Most often the manifestations appear in the third and fourth decades of life, though in our series they appeared in the age period from twenty-one to sixty-seven. In older people the symptoms are sometimes diagnosed as a "stroke." When seen in the younger age group, the disease is usually more severe. The exact etiology is not known. Various authors ascribe it to the persistence, hyperplasia or even a tumor of the thymus. Others feel that the disease may possibly be of nervous origin, or that the fatigability is due to faulty metabolism of the muscle cells.

The diagnosis is always spoken of as easily made and possibly this is so, but it is also often passed over, for there may be remissions of the symptoms and thus the diagnosis is missed Most of the early symptoms are referable to the eye and jaws. These patients, often first seen by the general practitioner or internist, are frequently referred to the ophthalmologist because of this condition. He must be alert to recognize the disease. Some of these unfortunate people have had numerous refractions with no benefit because their disease, myasthenia gravis, was unrecognized.

A history of cold or grippe, as noted in our cases No. 9 and No. 14, sometimes precedes the onset of symptoms or aggravates the same, although this may be forgotten by the patient.

The relationship of myasthenia gravis to pregnancy is one of interest, and was discussed by Viets, Schwab and Brazier[22] in a recent article. Our case reports No. 8 and No. 13 are extremely interesting, both as to the occurrence or the increase in symptoms following delivery.

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To properly treat these patients an early diagnosis must be made. The disease is progressive and, though characterized by remissions, may terminate fatally.

Inasmuch as the cranial nerves supplying the muscle groups are most often affected first, the resultant symptoms are here presented. Two groups of symptoms are noted: (1) the ocular; and (2) those referable to other muscles or muscle groups. Among the first symptoms is diplopia. It has been estimated to be present as the earliest symptom in 50 per cent of the cases (in our series, 80 per cent). This is confusing to the patient and sends him to the oculist. The cause is a weakness or partial paresis of the extra-ocular muscles. This weakness is acknowledged to be due to neuromotor dysfunction and not a contracted state of the musculature.

Abrahams[1] found in this type of diplopia an irregularity in the amount and quality of heterophoria, transient in nature, an irregularity in duction which was unusually high, and a closeness of the images. He does not think it should be called myasthenia, that is, a true muscle weakness. These transient tropias or drifting phorias are relieved by prostigmine in some cases. Such symptoms are not found in other conditions and hence are of definite diagnostic value.

With the presence of these symptoms, however, there is usually no change in the visual acuity or refractive error, nor is there any change in the pupillary reactions or accommodative power, which are unaffected by prostigmine or other similar therapy.

Ptosis of the upper lids, one or both, is the next most common symptom, and varies in intensity. It is present in about 80 per cent of the cases (in our series about 70 per cent). It can easily be determined by measuring the width of the palpebral fissure with a pocket ruler. In early cases ptosis is not present in the morning, but comes on with fatigue and is overcome in the earlier stages of the disease by rest.

A routine eye examination, taking the vision, tests of forehead movements, refraction and muscle tests, will bring out the diagnostic points. Other than the positive findings given above, tests, such as of the perimetric fields, ophthalmoscopy, etc., reveal normal findings.

The next most common involvement is that of the muscles of mastication. Here, food may lodge in the cheek and the patient easily and obviously tires upon chewing. In close connection is the weakness of the muscles of deglutition and phonation, so that the patient complains of difficulty in swallowing and has a nasal twang to his speech. Later, it becomes increasingly difficult to talk. In some cases there is weakness of the vocal cords, and in others food is regurgitated and this may be dangerous. Later still, the head may droop and wobble and become unsteady; here you may even see the patient holding up the head or lower jaw with the characteristically sad expression of the face.

In addition to the cranial nerve involvement affecting the muscles just mentioned, there is the second group referable to other muscles or muscle groups. Here practically any voluntary muscles in the body may be affected. For example, it may be very difficult for the patient to comb the hair; the act of lifting food to the mouth in ordinary feeding may be almost impossible to perform. These simple acts become fatiguing work, and it may be extremely difficult for the patient to walk upstairs. General muscular weakness, especially of the arms or legs as in crossing them or stepping up, comes on later.

One of the most serious symptoms is dyspnea as a result of fatigue of the respiratory muscles which may, if progressive, become fatal.

The characteristic and outstanding symptom of myasthenia gravis is the variation in degree of the muscular weakness from day to day and especially at different times of the day. An extremely important lead is the statement that the patient feels best when arising and rapidly fatigues as the morning goes on and that the symptoms gradually become worse with slight fluctuations during the day. Only the motor system is involved as is shown by the total absence of sensory symptoms and findings.

The diseases and pathologic conditions which are most likely to cause confusion and error in the diagnosis of myasthenia gravis are post-encephalitic parkinsonism, chronic nervous exhaustion, progressive muscular dystrophy, progressive muscular atrophy, psychoneurosis, poliomyelitis, cranial nerve paresis (whatever the underlying pathology), pernicious anemia, multiple sclerosis and central nervous system syphilis. However, such confusion should not persist for long as the findings and course of the disease are typical. Some of our cases illustrate the similarity of symptoms and the difficulty of diagnosis. All of

this first group were examined prior to the advent of the prostigmine test which, when used, simplifies the diagnosis, as will be noted later.

*Case 1.*—Mrs. J. P., a housewife, aged forty-six, was first seen in 1917 and many times thereafter with minor ailments and numerous operations. Menopause started in 1928, when she also had an attack of herpes zoster and neurosis. She complained of loss of strength in the legs and marked general weakness. This gradually improved, but later she had difficulty in swallowing and a feeling of swelling in the throat. A tentative diagnosis of globus hystericus was made. During the next year there was gradual loss of weight, progressive general weakness and homonymous diplopia. The blood Wassermann test was negative. A year later a partial paresis of the left external rectus muscle occurred with general weakness and psychoneurosis. There was a mild refractive error and presbyopia was present with poor convergence, but the vision, perimetric fields, fundi and Baranay tests were negative. Diagnoses of Parkinson's Syndrome, chronic nervous exhaustion, multiple sclerosis, syphilis and myasthenia gravis were considered. Progressive failure occurred and the spinal fluid showed a positive Wassermann. The patient died on March 18, 1938 with a diagnosis of central nervous system lues and cerebral tumor, which was confirmed by autopsy.

This case illustrates the difficulty sometimes encountered in the differential diagnosis and the fact that syphilis may simulate myasthenia gravis, particularly when progressive weakness, diplopia and dysphagia are present.

*Case 2.*—Mrs. J. A. H., a housewife, aged twenty-three, was referred to the Clinic, November 30, 1936.

She had had nystagmus and diplopia with a history of previous sixth nerve palsy. There was slight ptosis of the upper lids and a crossed diplopia present. General weakness and difficulty in walking were noted. The fields showed superior quadrant defects, enlarged blind spots and absolute central scotomata. There was partial third, sixth and seventh nerve paralysis of the left eye and poor vision. A diagnosis of multiple sclerosis was made and she was placed on typhoid shock therapy.

Two years later she was improved, although she had had one remission. She was last seen two years ago and there was slight ptosis and nystagmus, also definite contraction of the color field and cæco-central scotomata continuous with the blind spots, and temporal pallor of the discs. The diagnosis was multiple sclerosis.

The differentiation between myasthenia gravis and multiple sclerosis is often confusing as illustrated above. Both may have ptosis, diplopia and weakness and be characterized by remissions. The neurologic signs, such as nystagmus, scanning speech and intention tremor, and fields and fundus changes are most characteristic of multiple sclerosis, though they too may at times be absent.

*Case 3.*—Mrs. G. P., a housewife, aged thirty-nine, was first seen on December 20, 1936.

Her complaint was diplopia which had been present for two weeks. She gave a history of one attack five years before; she then improved but now had a gradually developing general weakness. Blood and spinal fluid Wassermann tests were negative. The physical examination was negative except for absence of the superficial abdominal reflex on the left side.

She was seen five years later. She had marked ptosis of the eyelids, extra-ocular muscle paresis, normal vision, but the fields were contracted and there were enlarged blind spots. Diagnostic impressions were myasthenia gravis, multiple sclerosis or bulbar lesion. Provocative tests were made, but were not conclusive. There was a possibility of myasthenia gravis, although a central nervous system lesion seemed more probable.

Lesions of the central nervous system, such as bulbar palsies, encephalitis, and basal pachymeningitis are also confusing, but the progressiveness and permanency of their findings, the definite neurologic changes and the absence of reaction to the diagnostic test largely rule out myasthenia gravis.

The diagnosis of myasthenia gravis is important. There is a definite treatment which is of great value and in all fairness to the patient, myasthenia gravis should not be considered a hopeless disease. In order to diagnose the disease one must always remember the possibility of its existence in patients complaining of symptoms and signs of the type and nature which we are attempting to bring out in this paper. A complete and accurate history and examination with special emphasis on the neurologic examination are of the greatest importance. In 1935, Viets and Schwab proposed the use of prostigmine as a test for myasthenia gravis. Their initial report has been amplified by them several times. We believe the test is of so much value that we are incorporating the actual procedure into this article. There are other tests, such as the electromyographic and ergographic studies, which require special apparatus and are not available to the general practitioner. The prostigmine test can be used by anyone who uses ordinary care.

The prostigmine test as used by us consists of the use of prostigmine methylsulfate and atropine sulfate. It is prepared by Hoffmann-La Roche, Inc., so that 1 c.c. of the diagnostic material contains 1/40 grain (1.5 mg.) of prostigmine methylsulfate and atropine sulfate 1/100 grain (0.6 mg.). The diagnostic test chart whereby objective improvement and subjective improvement are

noted at intervals of ten minutes is a convenient and quite accurate method of determining response to the material injected. The publications by Viets and Schwab[17] and the directions in the test set as made up by Hoffmann-La Roche, Inc. make the test one of comparative simplicity which can be used in the office or hospital by any physician. We have found it of equal value, both in determining the presence of myasthenia gravis and also in ruling it out.

Due to the marked change in symptoms of patients with myasthenia gravis after the prostigmine injection, some observers feel that the need of scoring by making several observations is unnecessary. This is true, perhaps, in three-fourths of the myasthenia cases, but in the non-myasthenic group, particularly in chronic patients, suggestion plays a large part and they may score high enough on the subjective symptoms to make a diagnosis of myasthenia possible unless several tests are made. Since the test can be completed in an hour, and since it requires no elaborate apparatus, we feel that the formula here suggested is so simple that any physician can carry it out. We agree with them that the long period of observation formerly used is impractical, and in our clinic it has been found unnecessary.

It is to add to the cases heretofore reported that we present our series with comments that may be of value in both diagnosing and treating subsequent patients encountered with this syndrome.

*Case 4.*—Mrs. M. M., a housewife, aged twenty-one, was first seen in September 1929.

Three months before she had had twitching of the hands and difficulty in keeping the eyelids open. Later, there was difficulty in the use of the facial muscles and in swallowing and eating. This increased and she reported because of this trouble and also because of trouble with walking. When drinking water, it was regurgitated and often caused coughing.

Upon examination the patient talked indistinctly. There was slight ptosis of the upper eyelids and difficulty in swallowing fluids. Examination of the ear, nose and throat was negative. One week subsequently she developed a pharyngeal paralysis. Spinal puncture and other eye findings were negative. A tentative diagnosis of a toxic bulbar paralysis or myasthenia gravis was made.

The patient was removed from the hospital without consent and no further report was obtained.

This might well have been a case of myasthenia gravis, though, of course, bulbar palsy could not be ruled out due to an insufficient period of observation.

*Case 5.*—R. N., a retired farmer, aged sixty-four, was seen in August, 1933.

He complained of difficulty in getting out of bed and weakness of the left arm. He had been seen previously since 1923. He had had anorexia, cough and dacryocystitis of the right eye. At this time he had an intention tremor of the hands and limbs, sluggish eye reflexes and slight ptosis of the upper eyelids. The condition remained the same at two subsequent visits. A diagnosis of myasthenia gravis and paralysis agitans was made.

Here it was well to think of myasthenia gravis and not hurriedly call it a stroke.

*Case 6.*—C. L. B., a farmer, aged thirty-four, was seen in April, 1934.

He complained of difficulty in speech which started in 1930, his tongue tiring and speech becoming thick. Three years previously he had noted that the eyes tired and the lids drooped on reading. Two years ago he had spells of diplopia and of late noted weakness of the extremities on exertion.

Examination revealed a staring expression and thick voice. The general findings were negative except exaggerated cremasteric reflex and knee jerks with an intention tremor of the tongue and hands. A working diagnosis of myasthenia gravis or postencephalitis Parkinsonian Syndrome was made. The patient was not seen again and no further conclusions were reached.

*Case 7.*—H. S., a male, aged forty-three, a Bertillon expert, was seen in April, 1933.

He reported because of blurred vision and diplopia. He had been seen from time to time from 1921 for other causes including an appendectomy and refraction.

Upon examination a diplopia of the crossed type was present, and the perimetric fields were somewhat contracted and slightly irregular. Except for exaggerated knee jerks, the general examination was negative, as were the blood Kahn and Wassermann. An upper motor nerve lesion was thought of and also encephalitis. One month later he still had diplopia, photophobia and some hoarseness. A central nervous system lesion was ruled out by the neurologist and a diagnosis of myasthenia gravis made.

He was placed on treatment with ephedrine and improved. He used prisms which helped, but he later discarded the same. The general condition improved, but he still had diplopia. He moved away and was not seen again.

This is a case of myasthenia gravis with remissions. All other findings, x-ray examinations, etc., were negative. Inability to follow up this case is regretted.

*Case 8.*—H. W., a farmer, aged fifty, was seen in December, 1933.

This patient came in because of poor vision in the left eye, headaches and diplopia. Later he was found to be myopic with an amblyopia exanopsia of the left eye. A ptosis of the lid had been present for years. Physically he was more tired than previously, though no definite weakness was made out. Other findings were negative, though glasses improved his vision.

He was placed on ephedrine and the diplopia improved. The diagnosis was myasthenia gravis.

*Case 9.*—M. D. W., a male teacher, aged forty-seven, consulted the Clinic in December, 1933, because of throat trouble; that is, after speaking he was tired and had difficulty with his speech. Of late he had had trouble with swallowing and eating; food lodged in his cheek. The past history disclosed that this had started six months previously, but he had had transitory diplopia three years before and some ptosis six months before. He had tried glasses and chiropractic treatments with no help. He thought that his present trouble had started with a cold three months before consulting us. At times he had had to hold up his jaw as it became tired.

Examination revealed marked nasal speech and trouble in phonating. There was partial ptosis of the eyelids and diplopia with weakness and inability to turn the eyes to the right. The general physical examination was negative. The spinal fluid was negative as were the vision, visual fields, fundi and refraction except for presbyopia. He definitely improved under ephedrine and glycine treatment. The diagnosis was myasthenia gravis. Here is our first case which apparently followed or was aggravated by a cold.

*Case 10.*—Mrs. H. J. L., a housewife, aged forty-seven, was seen in October, 1935.

She came in complaining of difficulty in swallowing which was first noticed about four months before, following the delivery of a full-term infant. This had gradually become worse. During the past month she had had very marked difficulty in swallowing. She had been able to swallow only liquids and these only occasionally. About one month previously the dysphagia had become very marked and was accompanied by difficulty in talking, drooping of the upper eyelids and a diplopia. Since her pregnancy she had tired very easily on exertion. For the past two days the right upper eyelid had been much worse, so that she could scarcely open the eye at all without lifting the eyelid with her finger. At no time had she had any pain or any headache.

The past history revealed that this patient was refracted here nine years ago. She had had no complaint previously.

Examination revealed ptosis of the lids, nearly total loss of movement of the extra-ocular muscles with resulting homonymous diplopia, marked difficulty in talking and weakness of the muscles so that she had to hold up the lower jaw with her hand. The vision, fields, pharynx and the fundi (except for slight vessel tortuosity) were negative. The general physical examination including Kahn and Wassermann was negative except for slight increase in tendon reflexes. The diagnosis was myasthenia gravis.

She was placed on ephedrine treatment and showed marked improvement within ten days and for a month. She then discontinued the treatment and consulted a chiropractor and again became worse. She reported at the Clinic four months later and was put on ephedrine and glycine and again improved. This case is also significant because her trouble definitely followed a recent pregnancy as noted above.

*Case 11.*—A. C., a farmer, aged sixty-seven, was seen in February, 1934.

This patient came in complaining of difficulty in speech. He stated that his present illness began eight months previous. He had been seen with different complaints off and on since 1917. It was now hard to understand him and he had great difficulty in speaking. For the past month he had had trouble with liquids getting in his windpipe.

Diplopia, dysphagia and dysmasesis were present. His general physical examination was negative except for diabetes mellitus. The vision was fair; fundi showed lens opacities and retinal arteriolar sclerosis. The Kahn and Wassermann tests were negative. Diagnoses of Parkinsonian Syndrome, multiple sclerosis and syphilis were ruled out. The patient was treated with ephedrine and improved. Diagnoses of myasthenia gravis, diabetes mellitus and arteriosclerosis were made.

*Case 12.*—A. L., a farmer, aged fifty-two, was seen in March, 1936.

He complained of blurred vision and diplopia for the past year and a half. He had been seen by us two years previously and had been given a prescription for presbyopia. There was no diplopia at that time. He had been seen for irrelevant complaints for the past twelve years. At one time he had had ptosis and a transient glycosuria.

Ptosis and diplopia were present. Perimetric fields showed a slight enlargement of the blind spots, but vision was normal and the fundi were negative. General examination was negative. Encephalitis and myasthenia gravis were considered. Three months later, he had weakness of the hands and legs and still had ptosis and diplopia. Later he had trouble with talking and eating and had definite weakness of the extraocular muscles. He was treated with ephedrine. The diagnosis was myasthenia gravis.

*Case 13.*—Mrs. A. R. R., a housewife, aged twenty-three, was seen in January, 1938.

She complained of diplopia which had been present for a year and a half and was not helped by prisms. She had previously been here for refractions and other conditions, with no evidence of this complaint. Her general health was good. Of late she had had ptosis and complained that food lodged in her cheeks; she was also having trouble with her voice and a general muscular weakness and tiredness. She had been delivered one month previously. Although she had had diplopia and some trouble with her jaws, this was not so marked prior to or during her pregnancy. However, one month following the delivery, all of the symptoms increased and she became progressively worse up to the time we saw her.

The ptosis was so marked that she had to tilt her head backward to see. Diplopia was present. The ocular movements were poor, there being no full muscle

excursion in any direction. Her vision was fair and the fields and fundi were negative. The general examination was essentially negative. The diagnosis was myasthenia gravis.

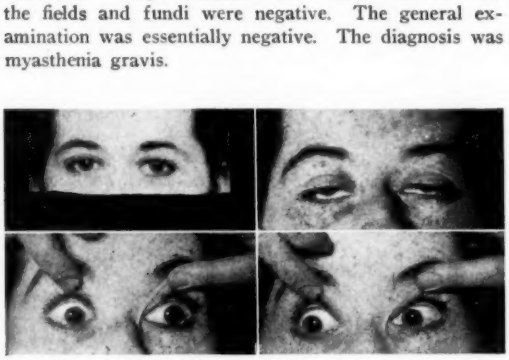

Fig. 1. *(upper left)* Photograph of eyes prior to onset of disease.

Fig. 2. *(upper right)* Photograph showing ptosis of eyelids during myasthenia gravis.

Fig. 3. *(lower left)* Photograph showing position of eyes on attempting to look to the left.

Fig. 4. *(lower right)* Photograph showing position of eyes on attempting to look to the right.

She was placed under treatment with ephedrine sulfate grains three-fourths three times daily, and showed marked improvement within two weeks. She then returned to her referring physician. Note the photographs taken before and after the onset of myasthenia gravis (Figs. 1, 2, 3, and 4).

This is the second case in our series which showed a definite increase in symptoms soon after pregnancy, which confirms Viets and Schwab's observation that though the symptoms may not show prior to pregnancy yet they are increased after delivery.

*Case 14.*—A. W. S., a salesman, aged forty, was seen in September, 1936.

This case illustrates the possible rôle of infection in acute exacerbation of symptoms. This man became ill on September 10, 1936, when he noted very suddenly that he was very tired and weak and was hardly able to walk in the afternoon and evening. He felt considerably better on arising in the morning. On September 16 he had a severe, shaking chill, but he was not seen by a physician for several days and when he was seen, his temperature was normal. This is significant of an acute cold or grippe. The patient attempted to do his work as a salesman and had to drive considerable distances. He fatigued so rapidly that by afternoon it was occasionally necessary to carry him out of the car to his residence.

Complete physical examination and laboratory examinations (including spinal fluid) revealed only marked weakness of the voluntary muscles of the hands and arms. The findings were those of weakness without true paralysis. Sensation was always normal. Absence of ocular signs and symptoms was especially noted. The therapy consisted of ephedrine sulfate and amino-acetic acid with definite improvement.

He returned to work about January 1, 1937, and continued to take the medication for approximately two years, since which time he has felt very well. There is no evidence of the previous symptoms and findings, and he has taken no medicine. The diagnosis was myasthenia gravis.

This case illustrates: (1) that it is not always necessary to have eye findings in a case of myasthenia gravis, nor do they necessarily precede the general muscular weakness, although they usually do; (2) that the symptoms were aggravated by an acute infectious episode.

From a review of the literature and from our own experience, it appears that the response of a particular patient to one form of therapy or even to a combination of different therapeutic agents varies. Reference should be made to these various agents. Edgeworth[5,6] has reported on the use of ephedrine and also on the use of amino-acetic acid, and Boothby[2] on the treatment with glycine. Physostigmine was introduced by Walker[23] who also introduced prostigmine. The oral administration of prostigmine as brought out by Everts.[7] Considerable further work is being done by these authors and also by Harvey and Whitehill[10] who reported on the use of prostigmine both as a diagnostic aid and for therapy. The use of guanidine hydrochloride by Minot et al[13] gives good results in the hands of some.

That care must be used in the oral administration of prostigmine is very apparent from the report of Goodman and Bruckner.[9] Perusal of their article leads to the conclusion that one must be certain myasthenia gravis is present before prostigmine is used orally or otherise in the treatment. Furthermore, the difference in the reaction to prostigmine in the body of a patient having myasthenia gravis compared to one not having the disease indicates a definite, distinct and different physiologic and chemical reaction.

Eaton[4] of the Mayo Clinic has summarized very well the present therapy of myasthenia gravis in regard to the use of prostigmine, ephedrine, guanidine and potassium salts and in his conclusions states that for the average patient the oral administration of prostigmine bromide is his basic treatment.

In our treatment of these interesting cases we have gone through a similar evolution as to drug therapy. We now agree that no patient should be treated for myasthenia gravis without first having diagnostic tests made.

A striking point in the therapy of patients with this disease is the distinctive individual reaction

to each therapeutic agent or to a combination of therapeutic agents. Likewise, the optimal dose of a single drug or combination of several drugs varies considerably. Each patient must be considered separately and no established rules as to dosage will fit a large group of patients.

The patient must realize the type of affliction he or she has and must live within his or her limits of physical accomplishment. Every effort should be made to avoid efforts which produce fatigue. Rest at frequent intervals during the day is extremely important and is, of course, obligated by the more severe phase of the disease. Frequent feedings of high caloric value in small amounts may be indicated. It may be necessary in some instances to use a very highly puréed diet as the danger of aspiration and pneumonia must always be considered. The use of tube feedings may be required. Good general nursing care is of great importance, of course.

There are many simple helps both for the improvement and comfort of the patient while undergoing treatment. For the relief of distressing diplopia an eye patch over one eye may be used, or spectacles with one dark or frosted lens therein. A simple method for the patient who wears glasses is to paint one lens with clear nail polish. Prisms may be tried, but in our hands they were not very successful.

In our experience amino-acetic acid and ephedrine have been of definite value. One point that must be remembered is that the cost is a factor with some of our patients and medication which is expensive is, therefore, not available to some of them. When such is the case, the use of the less expensive ones would seem desirable, as they are much more likely to be continued and thus produce the desired results.

We have not had much experience with the use of guanidine and the potassium salts therapy and cannot comment on these two agents.

Prostigmine bromide by the oral route is of definite value and the cost is not excessive. The dosage varies again in each case, from the smaller dosage of two of the 15 milligram tablets daily to twelve to sixteen in the more serious cases, distributed throughout the twenty-four hours. Atropine may be needed to overcome some of the drying effects of the prostigmine. Prostigmine methylsulfate may be needed subcutaneously or intramuscularly, especially if the more serious types of symptoms occur.

In our experience at the Clinic, glycine and ephedrine have been of definite value and should at least be given a therapeutic trial. The dosage of glycine must be quite large. The dosage of ephedrine sulfate will again vary from 1/8 to 3/8 of a grain two to three times a day. Like prostigmine, it is probably best if comparatively small doses are used at more frequent intervals. It has an added advantage of not being too costly for the patient.

We have at present very definite therapeutic agents for the relief of and possible cure of myasthenia gravis. These are not costly and surely abolish the former hopeless outlook for the sufferers from this disease. As heretofore noted, they must adopt the proper living regimen.

It is obvious that to help these patients they should be seen at frequent intervals and remain under close competent medical care. Similar to other diseases with remissions, they may get discouraged or with improvement, think they are cured and then neglect their care.

## Conclusions

1. We have endeavored to show that myasthenia gravis is not an uncommon disease.
2. Eleven cases have been reported to add to the literature.
3. In two cases the relationship of myasthenia gravis to pregnancy is brought out.
4. The definite diagnostic value of the prostigmine test is noted.
5. The present treatment is reviewed and our suggestions presented.
6. Cases of myasthenia gravis are no longer considered hopeless.

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## PORTAL CIRRHOSIS

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THE liver is the largest organ in the body, being composed anatomically and functionally of two types of cells, hepatic and Kupfer. The hepatic cells are arranged in cords radiating from the hepatic veins like spokes from cylinders. thereby forming a mantle about the hepatic venous tree. Into this mantle interdigitate the branches of the portal vein and hepatic artery, running into the sinusoids between the hepatic cords. The sinusoids are tributary to the hepatic vein. The hepatic artery carries 25 per cent of the organ's total blood supply and almost all of its blood oxygen. The portal blood has a low oxygen saturation and probably gives up little oxygen to the liver. For this reason, necrosis of the hepatic cells quickly follows ligation of the hepatic artery. The nutriment carried by the portal vein, however, is equally essential to the liver cells.

The Kupfer cells play little part in our discussion. They line the sinusoids and, like other cells of the reticulo-endothelial system, form bilirubin from broken-down hemoglobin for excretion in the bile. The bile capillaries run in the liver cords towards the periphery of the mantel, emptying into the bile ducts in the portal spaces.

The functions of the hepatic cells are manifold and incompletely known. Among the activities essential to our discussion are the following:

1. Storage of carbohydrate as glycogen. Adequate glycogen content is essential to liver health.

2. Deamination of amino acids arriving from the gut to form urea and fatty acid residue with further oxidation of the latter to available carbohydrate.

3. Maintenance of normal blood sugar level by conversion of stored glycogen.

4. Synthesizing or maintaining normal blood levels of heparin, prothrombin and possibly plasma proteins.

5. Storage of vitamins and antipernicious anemia factor.

6. Conjugation of glycine and taurine with cholic acid to form the bile acids and secretion of the sodium salts of these in the bile.

7. Excretion of bilirubin from the sinusoids into the bile capillaries.

8. Re-excretion in the bile of the urobilinogen and bile salts absorbed from the intestinal tract.

9. Excretion of cholesterol.

10. Storage of fat and oxidation of stored fats in the absence of glycogen.

With functions so manifold and vital, it is only natural to suppose a great reserve of tissue. Blood does not flow constantly in all the sinusoids but goes through periods of surge and rest, reminding one of the flow through glomerular capillaries of the kidney. Whipple found in poison experiments that destruction of two-fifths of each lobule in the dog could be repaired in a few weeks, the uninjured cells multiplying by mitosis and replacing the necrotic cells within the original recticular network, which is unaffected by liver toxins. The integrity of the portal blood supply is necessary for such regeneration, a significant point in this discussion of cirrhosis.

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The regenerative capacity of the liver in the presence of portal cirrhosis was appreciated by MacCallum in 1904 when he drew a clear picture of the pathologic processes involved. He described gradual necrosis of liver cells, sometimes accompanied by fatty metamorphosis, with some regeneration by mutiplication of adjacent uninjured liver cells, and replacement of lost tissue by outgrowth of connective tissues from the portal spaces. In other words, the mantle of radial cords about the hepatic veins is irregularly destroyed and incompletely repaired. Bile ducts proliferate in the portal spaces to connect with the remaining bile capillaries and maintain bile secretion. He pictured this as a gradual process of necrosis proceeding along with regeneration until the hepatic vein mantle becomes incomplete, leading to a microscopic picture of regenerating masses of liver cells without a central vein or with an eccentrically located central vein, and without lobular arrangement of the cords. By being denuded of the cellular mantle in places, the central veins come to lie in the portal spaces alongside the portal veins. MacCallum further described polymorphonuclear and round cell infiltration of the dying liver cells and mitotic figures in the adjacent healthy ones and related these to activity of the destructive process. He likened this to glomerulonephritis by saying that in the acute case the destruction of many epithelial cells stimulates the production of mitotic figures in those that are left, while, although regenerative changes are certainly present in chronic nephritis, mitotic figures are no longer found. With passage of time and progress of the cirrhosis, he observed contraction of the increased portal scar tissue with compression of some of the bile ducts and portal vein radicles resulting in jaundice (rather late) and portal obstruction with attempted establishment of collateral circulation between the portal and systemic venous systems.

Grossly the cirrhotic liver may be large or small, according to the amount of fat or fibrous tissue it contains and the degree of destruction of hepatic cells. The surface may be smooth or finely or coarsely granular. If it is granular, the depressions are vascular scar tissue and the elevations groups of surviving liver lobules, hypertrophied through regeneration. From clinical observations it is known that many of these livers are large in the early stages and shrink later on, presumably because of disappearance of fat and contraction of scar tissue. Other livers remain larger than normal due to permanent overgrowth of fibrous tissue. McCartney showed that in the earlier decades active cirrhosis is accompanied by hypertrophy of the liver and in later decades by atrophy, these terms referring to weight. This agrees with the known shrinkage of the normal liver with age.

Related to portal cirrhosis and almost indistinguishable from it pathologically is Mallory's toxic cirrhosis, or healed yellow atrophy, described in 1911. This is comparatively rare, because yellow atrophy is highly fatal. However, the same processes take place as in portal cirrhosis: fatty degeneration and necrosis of liver cells, some regeneration by mitosis of adjacent uninjured cells along the unharmed recticular skeleton, inflammatory reaction in dead cells, formation of compensatory regenerating nodules, and shrinkage and fibrous tissue replacement of unregenerated cells. The main difference between portal and toxic cirrhosis is that the former is the result of a gradual intoxication while the latter results from repeated, well-defined, more severe insults with production of jaundice and bile in the urine. Cases of toxic cirrhosis have resulted from cincophen and sulfanilamide. Some victims of such poisoning have not survived the atrophy to develop healing and cirrhosis. As a result of repeated insults, sometimes only two or three, the liver finally assumes a gross appearance similar to that of the more chronic portal cirrhosis except for more pronounced nodular hyperplasia. Children are more often victims of this type than of portal cirrhosis.

The etiology of portal cirrhosis differs in detail from case to case, but evidence from animal experimentation and preponderance of the disease in poorly fed people point to nutritional deficiency as a necessary predisposing cause. Alcohol has been incriminated with a good deal of justice, but it alone cannot cause cirrhosis in the presence of a good nutritional state of the liver. In the experience of pathologists fatty metamorphosis is the more common hepatic change in alcoholics. This is to be interpreted as a state of poor liver nutrition which will progress to cirrhosis if other liver injury is added to the continued poor nutritional state. Multiple neuritis, beri-beri, pellagra-like dermatitis and

other deficiency diseases have been found to coexist with cirrhosis in the alcoholic poor, although it must be remembered that advanced cirrhosis itself reduces the assimilation of vitamins by the liver. Recently Rich and Hamilton produced portal cirrhosis in rabbits by a synthetic high vitamin diet lacking in yeast. Von Glahn and Flinn reported that yeast protected rabbits to some extent against developing cirrhosis from lead arsenate poisoning. The incidence of cirrhosis is high in Switzerland and goiterous districts of the United States, suggesting that depletion of liver glycogen by hyperthyroidism deprives the liver of normal protection against causative factors in cirrhosis. Experimentally, combinations of chemical poisons, such as phosphorus and alcohol, and chloroform and bacteria, have caused cirrhosis in animals. Moon and others have isolated streptococci from livers with active cirrhosis. Whatever the directly exciting cause, one can assume that there necessarily is a basic nutritional deficiency operating over a long period of time.

McIndoe of the Mayo Clinic made some illuminating studies of the altered architecture of the cirrhotic liver. To demonstrate normal conditions he injected the vessels of normal livers and made celloidin casts. These give a picture of regularly interlocking terminal branches of the portal and hepatic veins by way of the sinusoids. These branches are everywhere equidistant, separated by the width of the hepatic vein mantle of liver cords. In the cirrhotic liver, prepared the same way, he was able to show great defects in this mantle, allowing the hepatic veins to lie alongside the portal veins in the portal spaces, and also to show large spaces in the cirrhotic liver practically devoid of circulation. By injection through the portal vein he was unable to reach the sinusoids of the new hyperplastic nodules but he could reach some of them by injecting the hepatic artery. In substance, he found the new nodules were cut off from the portal blood supply by many small Eck fistulæ taking the blood directly into the hepatic veins. Hepatic insufficiency, when it occurs, then, is usually not caused by loss of liver cells but by diversion of the portal blood from them through the intrahepatic shunting referred to above and the extrahepatic collateral circulation.

If the factors favoring continued liver damage continue, it is evident that the patient is doomed. Fortunately, the process stops and becomes latent in some cases. McCartney reported 35 per cent of a number of cirrhosis cases seen at autopsy as latent, meaning those with no history of symptoms, no clinical diagnosis, and no necropsy evidence of ascites, hemorrhage, or esophageal varices. Obviously this means that some of these livers heal to all intents and purposes or that collateral circulation develops so uniformly that no local overload develops. McCartney's latent cases, on the whole, show histologically a milder grade of cirrhosis than the active cases with a history of symptoms. Enlargement of the spleen was less frequent in his latent cases. He found latent cirrhosis more frequent in males than females.

This high incidence of latency suggests that there are no presenting symptoms in early cirrhosis. This is borne out by clinical experience. Mild digestive disturbances and slight weight loss may bring the patient to the doctor, but the disease must be considered fairly advanced even then. Physical findings may offer a little help. Jaundice occurs in about 50 per cent of cases but is late because it results from intrahepatic obstruction of the bile ducts by contracting scar tissue. A transitory signal jaundice has been described as occurring at the onset of the disease in some cases, reminding one of the initial hepatitis described for toxic cirrhosis. The liver may be enlarged in early cases due to fatty infiltration. The spleen may also be palpable, but this signifies portal obstruction or a lowered serum albumin. Visible distention of abdominal veins is usually present only with ascites, but in a suspected case, infra-red photography may detect early collateral circulation. Esophageal varices, if detectable by x-ray, signify a rather advanced cirrhosis. Hemorrhoids may also be present but rarely are large if due only to collateral circulation resulting from cirrhosis. Spider angiomata are truly helpful if found in the absence of a family history of them. They are often the earliest physical findings, consisting of bright red lesions with central points from which radiate fine hairlike branches a centimeter in length. They are usually seen on the skin of the face, arms, fingers, and upper trunk.

Routine blood examination may furnish a lead in moderately advanced cases in that anemia is common. It may be of the pernicious type with the difference that free hydrochloric acid may be

found in the gastric secretion. It may undergo spontaneous remissions or respond to liver therapy. The anemia is never so severe as pernicious anemia, probably because the kidneys, too, have storage capacity for the intrinsic factor, but its severity is proportional to the extent of liver destruction. Since iron assimilation is usually faulty, the anemia may be hypochromic. However, macrocytosis and hypochromia have likewise been explained on the basis of lowered plasma albumin with imbibition of water by the corpuscles due to lowered osmotic pressure of the plasma.

Among the special blood chemistries, plasma protein determinations promise the most. Plasma albumin is diminished and globulin elevated in a great majority of all types of liver disease, especially cirrhosis. The liver normally stores a great deal of albumin or albumin-producing substances. Apparently it is unable to maintain adequate plasma albumin values when damaged. The globulin increases in a compensatory manner, making the total protein value normal in most cases. Qualitative changes in this globulin fraction are responsible for the most delicate tests we have for liver damage, Hangar's cephalin-cholesterol and Gray's colloidal gold flocculation tests.

The former is fairly simple. Normal serum will not disturb the cephalin-cholesterol colloidal system, but serum in hepatic disease produces flocculation of lipoids in from twenty-four to forty-eight hours.

Gray says that the gamma globulin is increased in liver disease, accounting for the paretic type of curve he gets in his serum colloidal gold test. The sensitivity of this test is quite amazing. In hepatico-lenticular degeneration, otherwise known as Wilson's disease, a hereditary neurological affliction coming on early in life, there is good evidence to indicate that cirrhosis precedes the neurological involvement in every case. Yet, the cirrhosis is silent at first, and the neurological symptoms bring the patient to the doctor. Sweet, Gray and associates in Chicago reported uniformly positive results with the colloidal gold test in these subclinical cases of cirrhosis.

The favorite at the Mayo Clinic, and the simplest of all, is the bromsulfalein test. Five mg. of the dye per kilo of body weight is injected intravenously, the blood serum collected after an hour, alkalinized, and compared with standards and normal serum. A retention of over 4 per cent is abnormal, the great bulk of the dye being excreted by the liver in the bile. This test is a good routine procedure in the absence of jaundice but lacks the sensitivity of the other two mentioned.

Thus, the diagnosis of liver damage early is seen to be largely a chemical problem and one to be undertaken largely upon suspicion aroused by digestive disturbances not otherwise explained or in the presence of multiple vitamin deficiencies or alcoholism in the poor. Diagnosis of cirrhosis in the advanced stages is purposely omitted from this discussion.

The best reason for this presentation is that there is a well established impression among experimental workers and clinicians that the liver can be protected against the action of liver toxins by proper diet. This diet must be high in carbohydrate to insure a good glycogen content of the liver. It must be low in fat to lessen the necessity for fat storage in the liver. Fat storage seems to be harmful even in the presence of a high glycogen content. The protein in the diet should be made up largely from vegetable sources and eggs and milk because of the impression that meat proteins place a heavy load on the deaminizing and uric acid destroying functions of the liver. Choline is thought to be highly protective against fatty metamorphosis.

The liver is a storage depot for vitamins A, C, D, and at least certain portions of the vitamin B complex. It uses vitamin K to produce prothrombin, essential to normal blood clotting. The badly cirrhotic liver responds to treatment with these vitamins rather poorly because of deficient circulation and loss of manufacturing and storing capacity. Since the avitaminosis of late cirrhosis is so refractive to treatment, early diagnosis and therapy become the more imperative.

To show what can be done with advanced cirrhotics, however, Patek and Post are treating a number in New York with a good diet and bed rest, supplemented by yeast and vitamin $B_1$. They have observed improvement in a substantial number, with disappearance of jaundice, edema, ascites, and vascular spiders in some of them. Seemingly a prognostic point, in their experience, is the initial level of the serum albumin. Those with the highest initial levels respond the best to treatment.

Butt and Snell of the Mayo Clinic recently reported that, after observing Patek's results, they have used this diet with some modification

for the past two years, with encouraging results. Their diet consists of from 350 to 500 gm. of carbohydrate, from 110 to 145 gm. of protein, and approximately 60 gm. of fat. They allow half the protein to be from meat to facilitate preparation of the diet. In addition, they give vitamins A and D in the form of concentrated fish liver oils in doses of from 25,000 to 50,000 international units once or twice daily. They give thiamine chloride, 10 mg. daily, in divided doses and from 8 to 12 ounces of citrous fruit juices daily. They also give from 30 to 50 gm. of brewer's yeast daily, mixing the powder with tomato juice or egg nog or giving the tablets. In addition, they inject crude liver extract two or three times weekly or substitute the oral aqueous extract three times daily. Intravenous glucose is also used, especially in acutely ill patients with signs of hepatic insufficiency.

In conclusion, then, we are dealing with a degenerative disease of the liver which becomes latent in some cases but in most instances progresses silently to produce symptoms only when portal obstruction occurs. There is hope for these people in a protective diet, provided it can be administered early enough. The diagnosis of early cirrhosis depends upon keen clinical observation, thinking of the disease, and the application of several good tests for liver damage long before the advent of ascites and jaundice.

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## TETANY IN THE SEVERELY TRAUMATIZED NEWBORN

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BEFORE the days of blood chemistry the term "tetany" was ascribed to a certain clinical syndrome that was successfully treated with calcium. Because the conditions under which it cropped up were so varied, a group of descriptive words and phrases came to be attached, such as infantile tetany, maternal tetany, occupational tetany, puerile tetany, tetany in infectious diseases, etc. As a result of the advent of the chemical method, however, the modifying terms have changed so that we speak now of bicarbonate tetany, phosphate tetany, guanidine tetany, hyperventilation tetany, hypoparathyroid tetany and the like. This represents a distinct advance in that it adds definition to the diagnosis. At the same time it emphasizes the multiplicity of causes of tetany and should warn against any conception of etiology which does not take this into account. That warning has not always been heeded by those writing on tetany occurring during the newborn period.

Bakwin,[1] Farr,[5] and others[6,7] have attempted to place the diagnosis of newborn tetany on a chemical basis and to restrict it to infants having a blood calcium of 8 mg. or less. By so doing they would strike out from that class many of the most impressive cases that have been reported. Presumably this is done in the interests of science. However, such a creed immediately raises the question of how much scientific value a type of thinking can possibly have when it eliminates opposing ideas, not by explaining them away, but by ignoring them.

Tetany was in the beginning, and still is, a clinical diagnosis, suggested by the group of symptoms observed and proven by the response of those symptoms to calcium therapy. Chemical analyses have done much to explain and clarify knowledge concerning that disease but, as yet, they have not gone far enough to settle all problems that clinical observation brings up. Not until that time comes can reasoning based upon chemical analyses hope to survive against opposing opinion based upon careful, accurate, and honest clinical observation. Theory based upon chemical analyses dare not fail to explain the clinical problems, for this is a situation in medicine where clinical facts, even more than usually, are the proving ground for chemical theories. Fact is a hurdle that theory, to survive, must jump. It is not an obstacle that can be circumvented.

Basing the diagnosis, not upon chemical analyses but upon clinical response to therapeutic effort, it seems obligatory to me that we broaden our perspective of etiology rather than restrict

it. This I have repeatedly tried to do in the past[9] and this paper represents another attempt to continue this practice.

Ever since Bakwin[1] emphasized the probable importance of phosphorus in the etiology of this disease I have wondered if this might not be a connecting link which could explain a growing conviction that newborn tetany is really more common in severely traumatized infants. Such babies should have a larger amount of cellular destruction than those born normally, and if this should occur, phosphorus might be released and lend its aid toward the development of tetany. This might be expected especially in cases with extensive hemorrhage, whether it be within or without the cranial cavity. The following case, in which the hemorrhage occurred in subcutaneous tissues, illustrates and supports the theory.

## Case Report

A baby boy, born by very difficult forceps delivery, was seen on the second day principally because he looked so badly. Incidentally, he had vomited some of his feedings. Examination revealed the fact that almost the entire scalp had been torn loose from the underlying tissues so that frank hemorrhage had occurred to the extent that the enlarged head felt much like a mildly inflated bladder. In spite of this tremendous evidence of local trauma nothing suggesting intracranial injury could be discovered. Furthermore, nothing suggesting newborn tetany was present.

Recalling past experience, I ordered parathyroid extract at once in anticipation of the development of tetany. In spite of the treatment the tetany syndrome began to appear within a period of twenty-four hours, and it was not under control for fourteen days. The only important measure employed was the injection of parathyroid extract, a total of 11.5 c.c. being given by the twelfth day of observation.

When, during the second day of observation, the tetany was seen to be increasing in spite of large doses of parathyroid extract, 25 c.c. of hemolyzed fluid from within the hematoma was withdrawn and analyzed for its phosphorus and calcium contents. The former proved to be 7.5 mg. and the latter 7.6 mg. per 100 c.c. of material. A second analysis, twenty-four hours later, at which time the rest of the available fluid was withdrawn, showed a phosphorus content of 6.7 mg. and a calcium level of 7.5 mg. per 100 c.c.

Following this second withdrawal, improvement seemed to increase definitely. This might be illustrated by the fact that up to this time, two and a half days after first observation, 5.5 c.c. of parathyroid extract had been administered without success in holding the tetany in check, while after this period a total of 6 c.c. was all that was required over a period of eleven and a half days to clear the tetany entirely. At that time, the blood calcium was 11.8 mg. and the blood phosphorus 7 mg.

## Discussion

The reasoning behind the therapeutic effort in this case is directly attributable to suggestions made to me by Dr. Mildred Ziegler.[11] While explaining the manner in which hemolysis might increase the phosphorus content of blood serum she referred to articles by Martland and Robison,[8] and by Binger[3] as having important bearing on my problem at the time.

Martland and Robison showed that hemolysis caused an increase in the inorganic phosphorus content of the blood serum, and furthermore that even unhemolyzed blood, if kept fluid at body temperature for several hours, would increase its inorganic phosphorus by as much as 20 per cent. Binger demonstrated that phosphate possessed toxic qualities which were associated with a drop in the serum calcium level, and which might be accompanied by the development of tetany (except where acid phosphates were used).

These two papers afforded ample justification for the suspicion that hemolysis might be one of the factors behind the development of newborn tetany. This factor should have a certain limited influence even in the normal newborn in whom an appreciable amount of hemolysis must take place within the first few days of extrauterine life. But in the severely traumatized infant, in whom extensive hemorrhage had occurred, either in the form of frank hematomas inside or outside the cranial cavity, or just as extensive ecchymoses, a greatly augmented significance might reasonably be assigned to this process. From this background the determination to test the feasibility of this theory in the next favorable case developed. This infant seemed to present that opportunity.

Three methods of therapeutic approach presented themselves. The first was that of administering large amounts of calcium either by feeding or by injection. This should not only raise the calcium content of the body fluids but also neutralize phosphorus present. It is the method advocated by Bakwin. To prevent local precipitation of calcium phosphate[2] he suggests intravenous injections. However, I have shown that remote deposits of calcium in blood vessels and lungs is as possible as local precipitation.[10] Intravenous injection would not eliminate that possibility, so the giving of calcium in any form was considered a dangerous procedure.

Parathyroid extract has the double value of in-

creasing the elimination of phosphorus and of raising the level of blood calcium and was therefore considered the ideal treatment for this case.[4] The third procedure of value was peculiar to this case, namely, the removal of a reservoir of phosphorus by the aspiration of the hematoma fluid. The clinical course seems to indicate that this proved a valuable ally to the injections of parathyroid extract. Unfortunately, in a majority of severely traumatized newborns the removal of extravasated blood by this means would be impossible.

The importance of the observations made in this case, I believe to be very considerable. In the first place they give concrete support for my growing conviction, previously expressed, that tetany is more apt to develop in gravely injured newborns. They also may explain much of the confusion that exists in the minds of many over the differentiation of cerebral hemorrhage, for example, and the tetany syndrome. It has long been a contention of mine that many of the symptoms by which the former was diagnosed were at least frequently the symptoms of an accompanying tetany, and this case supports that belief. These things being true these observations permit an added hope in the outlook for infants severely injured during birth.

## Summary

Tetany was in the beginning, and still is, a clinical diagnosis recognized by a characteristic group of symptoms and proven by the response of that group of symptoms to calcium therapy. It is erroneous to attempt to use a single chemical standard such as a blood calcium level of 8 mg. as the basis for diagnosis. These statements hold true for tetany during the newborn period as well as tetany in general.

I have gradually been forced to the conclusion that newborn tetany tends to occur more frequently in the severely traumatized infants. Many possible explanations are perhaps available for this observation. This case supports a preconceived theory that one of the reasons for this fact is that hemolysis of extravasated blood releases enough inorganic phosphorus to upset the calcium-phosphorus ratio and reduce the available calcium sufficiently to bring this about.

In the treatment of these cases the administration of calcium by any means whatsoever is dangerous in that it may bring about a precipitation of calcium, probably always as the phosphate, within the body tissues, even far removed from the region at which it was introduced. The treatment of choice is the administration of parathyroid extract which acts not only to increase the concentration of calcium in the body fluids but also has the added advantage of increasing the elimination of phosphorus. In cases such as the one here reported, where the blood extravasation was sufficiently great in available areas to cause a hematoma, an effective aid to the administration of parathyroid extract exists through the aspiration of the hematoma fluid.

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### NEW LENS SIMPLIFIES EXAMINATION OF THE EYES

A lens which changes its focus in the same way that the human eye does, namely, by changing the curvature of its surfaces, has been patented by Robert Graham of Ohio State University. The oculist, in testing the eyes, instead of trying one lens after another, may put this single lens before the eye. Turning a little knob changes the focus, and a needle on a dial indicates the power. Two crossed cylindrical lenses of very thin glass (0.0028 inch) with liquid between them are used. Squeezing these together along the edges changes the curvature.—*Science News Letter,* October 17, 1942.

# CLINICAL-PATHOLOGICAL CONFERENCE

MINNEAPOLIS GENERAL HOSPITAL

A. J. Hertzog, M.D., and S. V. Lofsness, M.D.
Pathologists

## Presentation of a Case

DR. ROBERT H. ALWAY: This case is that of a fifteen-month-old female child. The delivery was normal and she was apparently well until the age of four months when one of the Community Health Service attending physicians noted that she had a droop of the right eyelid and constriction of the right pupil. In November, 1941, at the age of five months, she was referred to this hospital. Physical examination at this time, including x-ray studies of her chest, was essentially negative except for the presence of Horner's syndrome. The right pupil was contracted, there was a unilateral enophthalmus on the right and the right eyelids were closer together. The cause for this syndrome was not determined and the patient was discharged with instructions to return at a later date. She was again seen in June, 1942. Physical examination including an x-ray study of her chest was again negative except for the presence of Horner's syndrome. In July, 1942, discrete lymph nodes were palpated in the anterior triangle of the right side of her neck. A biopsy of one of the lymph nodes was done, but it showed no tumor. During the next several weeks, a mass developed above the right clavicle just lateral to the sternocleidomastoid muscle. This gradually increased in size. A biopsy of the mass was done, but no definite pathologic diagnosis was made. It was the impression of the surgical consultant that the tumor was malignant. Deep x-ray therapy was advised, and was begun about the middle of August, 1942. During the course of her third treatment, she suddenyly became cyanotic and developed intermittent noisy respirations. She was immediately returned to the floor and for three or four hours she had difficulty in breathing. Improvement made a tracheotomy unnecessary at that time. Further irradiation was not carried out because of the danger of tracheal obstruction from any sudden increase in size of the tumor. The child progressively became worse and on August 31 respiratory distress was so advanced that a tracheotomy was attempted. The trachea was found pushed to the left of the midline. While the trachea was being opened, the child expired.

DR. GRATZEK: We had several x-ray studies on this child. The radiograph of her chest in July, 1942, shows a discrete rounded density in the apical portion of the right thorax. In a preceding film, there is suggestion of the same thing, although it was called a negative film. It was only in July that the mass became definite on x-ray. The next picture after x-ray therapy was begun, shows an enlargement of the mass. It appears to be in the posterior mediastinum and has pushed the trachea to the left of the midline. I tried to fluoroscope the child but she struggled so much that the examination was unsatisfactory. The final film shows marked enlargement of the mass with evidence of bilateral bronchopneumonia.

DR. PEPPARD: When the child was first seen, were there not any findings on physical examination that lead to the x-ray study of her chest?

DR. ALWAY: No. There were no physical findings other than the Horner's syndrome. Later the mass became demonstrable.

INTERN: What appeared to be the immediate cause of death?

DR. SHER: Death appeared to have resulted from mechanical pressure of the tumor on the trachea, and bronchopneumonia.

DR. GRATZEK: X-rays of her chest shortly before she expired show evidence both of bronchopneumonia and mechanical obstruction to the trachea.

DR. HERTZOG: This tumor fits in very well with what Pancoast described in 1932 as a superior pulmonary sulcus tumor. The tumor develops at the apex of the lung and invades adjacent structures. Destruction of the cervical sympathetic produces the Horner's syndrome. A majority of the superior pulmonary sulcus tumors are bronchiogenic carcinomas at the apex of the lung; but other tumors in this situation may produce the clinical syndrome, that is, sympathoblastomas and metastatic tumor.

DR. LOFSNESS: We were not able to make a definite diagnosis from the biopsy, although it was studied by several pathologists. It showed dense fibrous tissue invaded by masses of very small intensely staining cells with little cytoplasm. Some of the cells were round, but many were spindle-shaped. There was no differentiation and no rosettes.

DR. HERTZOG: Does anyone want to venture an opinion as to the nature of the neoplasm before the autopsy findings are given?

DR. GRATZEK: I would say that a mass of this kind would be probably a neurofibroma or a teratoma, as they are not uncommon in the posterior portion of the upper thorax.

## Autopsy Findings

DR. HEISE: At autopsy, the right pupil was larger than the left, measuring 5 mm. and 4 mm. respectively. In the chest, both lungs were found to be atelectatic in the lower portions. At the roof of the thoracic cage, after removal of the right lung, there was a rounded tumor mass 3 cm. in diameter attached to the right anterior surface of the sixth and seventh vertebræ. Its upper surface was irregular and extended up into the neck for a distance of 6 cm. It was very invasive, completely surrounded the right subclavian ar-

tery and vein. It had pushed the trachea approximately 3 cm. to the left and compressed its lumen. It was very difficult to remove the tumor because of its invasive character. After removal, the tumor measured 5x6½x1½ cm. On section, the tumor had a white fibrous appearance and was quite soft. On the anterior superior surface of the liver, there was a small white nodule measuring 0.5 cm. in diameter and another similar nodule on the surface of the left lobe measuring 3 cm. in diameter. A third nodule was found deep in the left lobe. It measured 0.5 cm. in diameter. No other areas of metastasis were demonstrated. A photograph of the child is shown that demonstrates the Horner's syndrome.

DR. LOFSNESS: Sections from the tumor show a malignant undifferentiated neoplasm. There is considerable necrosis present. It is composed largely of small, round dark cells with very little cytoplasm. There is a small amount of fibrous connective tissue stroma. The cells show no particular arrangement, although a few areas suggest rosettes. We know that we are dealing with a malignant tumor which has metastasized to the liver and produced death. The question of nomenclature arises.

DR. HERTZOG: The histologic structure suggests that the tumor arose from sympathetic nervous tissue and hence could be called a sympathoblastoma. A Bielschowshy silver stain failed to demonstrate any axones arising from the small dark cells. However, it is quite possible that the tumor is so undifferentiated that the cells have not developed axones. This tumor is closely related to the neuroblastomas arising in the adrenal medulla.

INTERN: If this tumor is related to those of the adrenal medulla, does it secrete epinephrine?

DR. HERTZOG: No, we are speaking of tumors arising from sympathetic nervous tissue. The type of neoplasm that may also occur in the adrenal medulla and secrete epinephrine is a tumor of the chromaffin cells of the adrenal medulla, and is called a paraganglioma or pheochromocytoma. It is a different type of tumor.

DR. MOOSNICK: Will tumors of sympathetic nervous tissue respond to x-ray?

DR. GRATZEK: I am not very well acquainted with these tumors, but we know that most tumors arising from nervous tissue do not respond very well. Medulloblastomas are an exception. X-ray therapy in this case apparently stimulated the tumor and some of the edema might have been caused by the therapy. In treating carcinoma of the larynx, radiologists usually ask that a tracheotomy be performed before they begin x-ray therapy, to guard against the effects of edema.

DR. LOFSNESS: To a certain extent, our diagnosis is by inference and exclusion. Tumors of the peripheral sympathetic system are more common in infants and young children. Also, the tumor was located along the right sympathetic trunk and was entirely extrapleural. Fisher classified these tumors of the sympathetic nervous system according to the degree of differentiation into (1) glanlioneuroma, (2) neuroblastoma, and (3) sympathoblastoma.

*Anatomical Diagnosis*—(1) Sympathoblastoma of posterior-superior mediastinum and neck. (2) Metastases to liver and lymph nodes. (3) Mechanical obstruction and displacement of trachea. (4) Bilateral bronchopneumonia.

# ◆ CASE REPORT ◆

## CHOLECYSTITIS DUE TO SALMONELLA ORANIENBURG

### Report of a Case with Secondary Wound Infection

**MILTON LEVINE, M.S., PH.D.**
**Minneapolis, Minnesota**

THE case history to be presented is important since it illustrates an unusual cholecystitis and secondary wound infection with *Salmonella oranienburg*. This organism was first isolated in the United States in 1939,[2] and has been reported in only one other case of cholecystitis.[1]

The patient was a white woman, aged fifty-one, who had a history of nausea and epigastric distress of about one year's duration. She was slightly icteric on admission. Her blood bilirubin was 6.4 urine urobilinogen 3, cholesterol 240. Her liver could be palpated 3 cm. below the right costal margin. A retrograde cholecystectomy was performed on May 26. Two grams of sulfathiazole powder was put in the wound. She received sodium sulfathiazole intravenously—1 gram on May 26 after the operation, 2 grams in 2 doses on the 27th, 4 grams in 4 doses on the 28th and the 29th. The Penrose drain was removed on June 2.

Pathologically, the gall bladder was thick-walled with a firm smooth mucous membrane. No common-duct stone was found, but the gall bladder was contracted tightly around a large partially pigmented stone (5x3x2 cm.). Microscopic sections of the wall showed a large amount of fibrous tissue irregularly infiltrated with lymphocytes and plasma cells; the mucous membrane was largely destroyed.

Duodenal aspiration on May 27 yielded a pure culture of a Salmonella which was later identified by Dr. P. R. Edwards as *Salmonella oranienburg*. On June 7, a small stitch abscess developed in the healing incision and a pure culture of *Salmonella oranienburg* was isolated from this. The patient was discharged after the wound abscess disappeared.

*Summary.*—A case of chronic cholecystitis is reported with cholelitheases in which *Salmonella oranienburg* is the probable etiologic agent. A secondary wound infection by this organism is described.

From the Department of Bacteriology and Immunology, University of Minnesota, Minneapolis.

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## PIONEER PHYSICIANS OF MARTIN COUNTY PRIOR TO 1900

By ROSCOE C. HUNT, M.D.
Fairmont, Minnesota

*(Continued from October issue)*

**Dr. Walter J. Richardson**[2,3,4,10,13] was born near Rochester, New York, in 1856, of New England parentage. His great grandfather served throughout the Revolutionary War as an officer. Walter J. Richardson was educated at Carleton College and at Amherst, graduating from the latter school in 1881. He attended the Harvard Medical School and studied anatomy under Oliver Wendell Holmes. From Harvard he transferred to the College of Physicians and Surgeons of New York, where he was graduated in 1885. The same year he started practice in Minneapolis but soon afterward established himself in Hutchinson, where he remained until 1892. He then moved to Fairmont, where he carried on an active practice until about 1934.

During the forty and more years that he practiced in Fairmont he was a leading physician and citizen, quiet, unassuming, and never seeking publicity. He practiced a conservative and highly intelligent type of medicine. Although at heart a very tender and sympathetic man he had a gruff exterior. He had no sympathy for the cults and openly said so. If a patient whom he had treated well left him for a quack, Dr. Richardson never forgot it and would never render him further service.

For many years he rode a bicycle and was a familiar figure slowly pedalling around on his calls, and even into the country, with his medicine case hanging over one handle bar and a spring clip on his right trouser leg. This clip he wore most of the time whether he was on the cycle or not. He was a physician who when he had a long obstetric case or was attending a patient who had a serious illness, "lived with the patient" until the crisis was passed. His family learned never to be worried about him if he did not show up for twenty-four hours or longer. It was this faithfulness to his clientele that so endeared him to all his patients and proved that his rather brusk exterior did not indicate his true characteristics.

Like many physicians, Dr. Richardson lost a good deal of money in speculative enterprises. Probably the most notable speculation was a Rainy Lake Gold Mine into which he had put a rather large amount. He made a trip to the site, saw gold ore actually brought out of the mine, and then went out as a salesman for the stock. Of course, the mine had been planted and there never was any gold there.

Although he was interested in the welfare of the community and his judgment and ability frequently were used in various ways, he never sought public office. In politics he was an uncompromising Republican. He served as a member of the county draft board in World War I and impartially made or supervised the examinations of some 4,000 men. He belonged to many lodges and was especially active in the Odd Fellows and the Masons. He was a generous contributor to the Congregational Church.

Dr. Richardson's last illness and death were caused by a fractured spine. He died in his home at Fairmont, February 20, 1936, at the age of seventy-nine years. His wife, Sarah, who was a New England and a Mount Holyoke girl, outlived him about a year. Three children had preceded him in death; two, Walter Bradford and Ruth, live in Fairmont and Syracuse, New York, respectively.

**Dr. William Henry Gough**[13,16,18] was born July 24, 1859, at Sioux City, Iowa. In 1865, the family moved to St. Joseph, Missouri. After attending high school, William Henry entered Ellsworth Medical School St. Joseph, and was graduated in 1884.

Dr. Gough settled in a small town on the plains of Kansas. The population, mostly Bohemian, had the idea that unless a doctor could cure a patient in one visit he was no good. After battling poor pay, dust and drought for a year, Dr. Gough moved back to St. Joseph and was for six years house physician to a large children's home and hospital.

In 1892 he decided to enter private practice and settled in Worthington, where he remained five years. In 1897 he moved to Sherburn, Martin County. After eight years he again changed residence, going in 1905 to Granada, a village ten miles east of Fairmont. Here he has remained and at the time these notes are compiled (1942) still does some practice to accommodate old friends.

In 1890, Dr. Gough was married to Ida Gould More, a minister's daughter. There were two daughters of this marriage. Mrs. Gough died in 1923. In 1926, Dr. Gough was married to Mrs. Nellie Newell.

His early experiences in medical practice were similar to those of other pioneer physicians. He relates an experience while at St. Joseph, in 1884, when attending a Negro woman. It was 30° below zero, one entire window was devoid of glass and there was a little stove in the center of the room that was red hot. During his stay he had to keep turning around to avoid freezing. Finally the baby came and seemed to like the cold, since it as well as the mother made normal progress. At another time while in Sherburn Dr. Gough made a trip through drifts fifteen miles to Cedar Lake where he attended a confinement. The thermometer registered 45° below zero. The shanty was so cold that he left on his buffalo overcoat and his overshoes throughout the procedure.

Dr. Gough has always been a typical "doctor of the old school" and a man of high standing. In his community he has served in many ways other than professional. He always has stood for the best things and has been a faithful supporter of the Congregational Church. It seems probable that with fifty-eight years of practice, Dr. Gough is now the oldest practitioner in this section of the state.

**Dr. Clarence C. Donaldson**[16,21,22] was born at Dundas, Minnesota, on December 5, 1858. His father was of Scottish descent and had come to Rice County from Pennsylvania in 1856.

Clarence Donaldson began his education in the country schools and afterward attended Carleton College. For several months he studied medicine in the office of Dr. William Greaves of Northfield. He later attended a course of lectures at Iowa City, and in 1887 was graduated from Western Reserve University at Cleveland. After a few months' practice in Goodhue County he settled in Clark County, South Dakota, where he spent three years. In the fall of 1890 he came to Fairmont, where he practiced for fifteen years.

Dr. Donaldson was married to Sarah Hine who came from Indiana County, Pennsylvania. There were three children, Samuel, Lavinia, and Robert.

Dr. Donaldson was a large, tall, fleshy man weighing about 300 pounds, very genial and popular. Because of the many friends he made and his ability and success as a physician he had a large practice. His politics were strongly Republican. He was an Odd Fellow and held many offices in the Lodge; he also was a Woodman, a Workman, and a member of other orders.

He was a great horse trader; in fact, horse trading was his hobby. This avocation well fitted into his free, happy character. The populace thought the doctor was slipping if he drove the same team more than a week. While it is almost a universal fact that doctors always lose on any speculative venture, it is said that Dr. Donaldson was never known to have got the worst of a horse trader.

In 1905, he left Fairmont and moved to Denver, Colorado, later going to Strasburg and Arriba, where he practiced until his sudden death which occurred May 24, 1929.

**Dr. E. H. Foster**[13,20] was known to have practiced in Sherburn in the eighties and for some years. His license is registered in the records of the Clerk of Court and is dated November 28, 1883. The directory of the State Board of Medical Examiners lists him in the 1890 Directory as residing at Sherburn and in the 1895 directory as at Fairmont. However, inquiry fails to show that he ever practiced at Fairmont and evidence indicates that he was only a short time at Sherburn.

**Dr. F. W. Weeks** came from Jackson County. His license was dated February 10, 1887. He was a homeopath and a graduate of the Medical Department of the University of Iowa in 1884. The directory of the State Board of Medical Examiners lists him in 1890 at Sherburn and in 1895 at Welcome. However, the former entry is undoubtedly in error as he is known to have practiced at Welcome from 1887 until the middle nineties.

**Dr. John Janss**[20] was licensed October 8, 1895, and the same year established his residence in Welcome. He remained there until about 1910, when he went to California where he still lives. He has practiced medicine in California and has been in the real estate business.

There were several physicians who, although they might not be considered as pioneer physicians, came to the county at the close of the century and began distinguished and extended careers.

**Gustav H. Luedtke** was born on a farm in Watanwan County, November 18, 1870. His early life was spent there. He was graduated from the University of Minnesota after having taught a number of years. He settled in Fairmont in 1899 and at the time of this writing is in active practice.

**Henry P. Johnson** was born in Oshkosh, Wisconsin, February 3, 1855. He was graduated from Rush Medical College in 1879. After practicing a number of years in Houston County he settled in Fairmont in 1899. He practiced actively until 1935, when he retired and turned over his practice to his son, Dr. Donald W. Johnson. At this time (1942) Dr. H. P. Johnson is in very poor health.

### Sources of Information

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4. Personal interview: Elmore Houghtaling, pioneer hardware merchant of Martin County.
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8. Personal interview: Mrs. Ellen McCartin Rooney, wife of John Rooney, Fox Lake Township, Martin County.
9. Communication: Mrs. D. W. Hunt, Glendale, California.
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**THE SEARCH FOR UNITY**

If we are to have a durable peace after the war, if out of the wreckage of the present a new kind of coöperative life is to be built on a global scale, the part that science and advancing knowledge will play must not be overlooked. For although wars and economic rivalries may for longer or shorter periods isolate nations and split them up into separate units, the process is never complete because the intellectual life of the world, as far as science and learning are concerned, is definitely internationalized, and whether we wish it or not an indelible pattern of unity has been woven into the society of mankind.

There is not an area of activity in which this cannot be illustrated. An American soldier wounded on a battlefield in the Far East owes his life to the Japanese scientist, Kitasato, who isolated the bacillus of tetanus. A Russian soldier saved by a blood transfusion is indebted to Landsteiner, an Austrian. A German soldier is shielded from typhoid fever with the help of a Russian, Metchnikoff. A Dutch marine in the East Indies is protected from malaria because of the experiments of an Italian, Grassi; while a British aviator in North Africa escapes death from surgical infection because a Frenchman, Pasteur, and a German, Koch, elaborated a new technique.

In peace, as in war, we are all of us the beneficiaries of contributions to knowledge made by every nation in the world. Our children are guarded from diphtheria by what a Japanese and a German did; they are protected from smallpox by an Englishman's work; they are saved from rabies because of a Frenchman; they are cured of pellagra through the researches of an Austrian. From birth to death they are surrounded by an invisible host—the spirits of men who never thought in terms of flags or boundary lines and who never served a lesser loyalty than the welfare of mankind. The best that every individual or group has produced anywhere in the world has always been available to serve the race of men, regardless of nation or color.—RAYMOND B. FOSDICK: The Rockefeller Foundation—A Review for 1941.

# President's Letter

## I.

The drafting of men, eighteen and nineteen years old, makes it imperative to devise some plan for the selection and education of premedical students. Some have said that there will be too many physicians when the war is over and consequently that the training of physicians could be curtailed now, or confined to those who have physical disability which makes them unsuitable for the armed services. I doubt this statement very much. At present physicians who planned to retire are continuing in practice and many of those who had already retired have returned to practice; by the time the war is over, another group of doctors will be ready to retire; a certain number will be lost in service. All of these groups together will reduce the number of physicians available for active practice after the war. We, therefore, cannot consent to curtailment of medical education or to any reduction in the number of medical students. Correspondents returning from Europe speak of the great shortage of physicians and the difficulties of supplying adequate medical care there. Health and medical care are of primary importance to the country in peace as well as in war. Let us not fail to prepare for adequate medical care not only during war but after the war.

It is impractical to train physicians without premedical instruction. Men entering college might take up their premedical courses at once and be deferred as long as they maintain satisfactory grades. The number of premedical students would have to be limited to the number previously accepted in each college; otherwise too many students would apply for premedical courses. Or men might be drafted in the regular way and assigned to colleges for premedical courses on showing serious and competent intention of studying medicine. Two years of premedical college work should be sufficient during the war. The medical schools which demand three years of college work or a bachelor's degree could modify their requirements temporarily.

By the time this appears in print, legislation may have taken care of the situation satisfactorily. If not, let us use our influence to see that education of physicians does not suffer. If protective legislation has been passed, physicians who act as examiners and advisers to local selective service boards should assume the duty of seeing that regulations are carried out in a manner which will protect those who qualify for premedical courses and medical training, and, if necessary, to impress the boards with the importance of supplying an adequate number of students.

## II.

Individually physicians are poor politicians. Only by organization, eternal vigilance and legal guidance can they protect the people from legislation detrimental to public health. Although they are poor politicians, physicians now have the opportunity to be minor statesmen. They are in a unique position for they can be important factors in the maintenance of morale during the war. By training they think first of the condition of the patient and his family and only secondarily of other considerations. This close association with the family group and its problems gives them an opportunity to counteract rumor, quiet discontent, uphold the principles of sound patriotism and sustain the flagging spirits of those who carry on in spite of deaths in service and illness at home. In the event of a long war maintenance of civilian morale will undoubtedly be an essential factor in victory. Physicians will prepare themselves for this role by evolving a sound philosophy and expressing their views with caution, consideration, and with regard to the effect on the individual, the family, the community and the country's war effort. Careless remarks and superficial criticism can do great harm.

H. Z. Giffin

President, Minnesota State Medical Association

# EDITORIAL


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BUSINESS MANAGER
J. R. BRUCE

Volume 25 NOVEMBER, 1942 Number 11


## MINNESOTA PROCUREMENT AND ASSIGNMENT COMMITTEE

THE *News Letter* recently issued by the State Association has informed you that Minnesota's 1942 quota of physicians for the armed services will be filled by next January. The profession of our state deserves congratulations on the successful fulfillment of their obligations. Not alone have they supplied needs of the armed forces voluntarily by their own efforts, but they are continuing to safeguard the health of home communities without any serious break in these sources. They have demonstrated that they not only are able to do so, but that they are best fitted to solve all problems of medical care.

Although the 1942 quota of physicians from Minnesota for the armed forces is now virtually filled, it should not be inferred that the responsibility of the medical profession in providing medical care for home communities and the armed services is over even for this year. Many problems requiring the active coöperation of the medical profession remain to be solved. It may be of interest to review the progress that has been made by the Minnesota Procurement and Assignment Committee and the indications for the future.

In the first place, the medical profession in Minnesota should be congratulated on the fine spirit of coöperation it has shown and its willingness to sacrifice personal interests for the good of the country. Let it be an example for men in other walks of life. The work of the Committee got off to a slow start, owing to delays and to confusion in the minds of the profession as to the intent of information blanks which were sent to them from Washington. The majority of those who were declared available by the Committee responded without delay, however, when their call to service came.

It is of interest to note that our quota will be completed without counting interns, residents and fellows who were enrolled in various hospitals and in the two institutions of learning in Minneapolis and Rochester. A large group of these physicians went into the services from Minnesota, but since they have not been engaged in actual practice in their communities, they are not accredited to this state. It is also of interest to note that the quota does not include those physicians who were in the Medical Reserve Corps. With the inclusion of these groups the number of physicians from Minnesota would amount to more than 1,000 or, roughly speaking, a third of the profession.

Although the Medical Officers Recruiting Board in Saint Paul is now closed, it will nevertheless be necessary to furnish physicians for proposed future increases in both of the services. According to the latest statement issued, the Army for 1943 will reach 7,500,000 men. While medical care for the present force is well provided for, a definite increase in the number of physicians, and readjustment of those already enrolled, will have to be made in order to take care of the number proposed for 1943. With an estimated air force in the Army of 2,500,000 men, the number of physicians allocated to that branch of the service, which will be well over 8,000, is not too large. The peculiarities of that service require a much higher ratio of physicians than

the average. The need of the armed services right now seems to be for younger physicians.

The Navy is well equipped for the present so far as medical care is concerned. In fact, it is said that a surplus pool of physicians now exists in the Navy which will be drawn upon to take care of 1943.

In making plans for next year, it will be necessary to continue where we left off and add sufficient physicians to meet the needs as they arise. The State Committee proposes to review the list of remaining physicians in the state carefully as to their availability for service. It may be impossible to take many more men from the rural areas of the state. However, some physicians can be spared from communities of moderate size and many more must come from the Twin Cities. It also will be necessary to draw upon that group over thirty-seven years of age. However, the Committee will continue to make every effort to avoid endangering community health and to scrutinize carefully the community needs.

Another problem confronting the Procurement and Assignment Committee is to find older men to take the place of younger physicians who have gone or could go into service. So far we have not met with much success. It would seem that such a sacrifice on the part of a physician might deserve as much credit as actually going into the armed services.

The Committee is at present making a survey of the needs of the industrial areas. A subcommittee having this problem in hand will soon be appointed and will do all it can to take care of this situation as necessity demands.

Your Committee believes that the physicians of Minnesota deserve great credit for the coöperation they have given us, and we are looking forward to continued coöperation in the future as the needs arise. After all, is there a physician in Minnesota who would not make any sacrifice necessary to help our country win the war?

W. F. Braasch, *Chairman*

## LIFE INSURANCE FOR PHYSICIANS IN SERVICE

A PHYSICIAN who enters the service would naturally ascertain the status of his life insurance policies. He should first find out from a perusal of his policies in force whether they have a war risk exclusion clause. Policies written since the fall of 1941 contain such clauses.

Some physicians cannot maintain their life insurance programs while in the service without borrowing. Physicians should know that according to the Soldiers and Sailors Civil Relief Act of 1940 those in service can obtain a moratorium on premiums on life insurance policies not in excess of $5,000 taken out before October 17, 1940, the date of the approved act.

In order to take advantage of this moratorium a Veterans Administration Insurance Form No. 380 should be filled out and sent to the insurance company and a copy to the Veterans Administration. The Veterans Administration will issue a certificate of the U. S. Treasury to the insurance company to cover all deferred premiums.

As in World War I a man in service may take out a government term policy which will terminate in five years unless converted before the end of that period. This policy makes no provision for total or permanent disability as in 1917, but does provide for waiving of payment of premiums during continued total disability.

It is perhaps unnecessary to advise physicians to apply for a government life insurance policy on entering service, to take effect immediately.

## PHYSICIANS IN SERVICE

WE are particularly desirous of receiving news of the many members who are in service for publication in Minnesota Medicine. Of course, certain information as to the whereabouts and activities of some members cannot be made public. But those of us who for one reason or another must stay at home are interested in what members in service are doing.

Only those who are or have been in service realize the interest those away from home have in the activities of friends and acquaintances in other branches of the service as well as at home. In this connection we wish to remind those in service that a notice of changes of address sent to Minnesota Medicine, 2642 University Avenue, Saint Paul, will bring the journal to their new addresses. This applies even to those in foreign countries for there is no government restriction to the mailing of the journal outside the boundaries of the United States.

On the whole, we stay-at-homes rather envy those who have signed up. We realize that in most instances those in service have given up practices, built up over a number of years, or medical positions and are making a financial sac-

rifice. Committees might well be appointed in each county society to work out details to protect the status of members entering the service. While many of the suggestions which have been made are not very practical, at least some publicity should be given to the idea that in fairness patients, hospital and medical school appointments and medical positions should be available after the war to returning physicians.

## CAN CALCIUM THERAPY PROTECT TEETH?

THERE are still, it appears, physicians and dentists who prescribe calcium, at any and all periods of life, for the promotion of resistance to dental caries. Recent dental research, however, has shown that several cherished beliefs in regard to calcium therapy should probably be abandoned. Chief among the fallacies to be discarded are these: (1) Caries increases during pregnancy because the fetus withdraws calcium from the teeth of the mother; (2) a child can be endowed with caries-resistance through prenatal calcium therapy; (3) caries resistance can be promoted by a high calcium intake after teeth are fully formed.

Dr. Isaac Schour of the University of Illinois and his co-workers have shown fairly conclusively that dental troubles in the expectant mother are *not* due to withdrawal of calcium from her teeth by the fetus. An adult's teeth contains less than a thimbleful of calcium, or only about 1 per cent of the body's supply. The great calcium reservoir is the bones, from which the fetus draws what it needs. No calcium, moreover, can be withdrawn from or deposited in teeth that are fully calcified, because such teeth are avascular and acellular, providing no mechanism for the transfer of calcium. Sound medical reasons often exist for increasing the calcium intake of a pregnant woman, but among these reasons that of tooth protection is conspicuous by its absence.

There is considerable doubt that pregnant women have more dental decay than nonpregnant women of similar ages and habits. Caries often occurs during pregnancy, just at it may occur in anyone at any stage of life. Gingivitis of pregnancy is also a well-known condition. The physician should advise the pregnant woman to visit her dentist, in order that the dentist may remove areas of infection, fill the teeth, and give general care to the gums.

Increased calcium during the period of gestation is as ineffectual for the developing teeth of the fetus as it is for those of the mother. As the late Dr. Rudolf Kronfeld has shown, all calcification of the permanent teeth occurs postnatally, and even in the deciduous teeth, calcification of most of the outer portion (the part subject to decay) takes place after birth. Thus the prenatal diet of the mother, though vastly important for other reasons, has little influence on the future condition of her child's teeth.

During the period from birth through early adolescence, foods rich in available calcium are probably of great significance for dental health, because it is during those years that the teeth are calcifying. For growth and development and the maintenance of a satisfactory level of blood calcium, such foods are needed all through life, but their period of usefulness for the teeth is probably limited to the first fourteen years.

The individual physician must of course use his own judgment in the matter of prescribing extra calcium for patients of any age or condition. But in regard to the use of calcium to protect the teeth, he may well profit from these recent findings of dental research.

VERN D. IRWIN, D.D.S., M.P.H.
Director, Division of Dental Health
Minnesota Department of Health

Attention is called to the President's Letter which appeared in the October number of MINNESOTA MEDICINE. The subject was medical education in wartime.

The training of undergraduates in medicine is highly essential at the present time in order to assure a sufficient supply of physicians in the near future for the services and also for civilian practice. In order that properly trained physicians continue to be graduated the medical schools should not be stripped of their faculties. Those on the medical faculties under the age of forty-five who are declared essential by the Procurement and Assignment Committee need not feel uncomfortable because they are not in uniform.

The officers of the County Societies particularly should read the letter mentioned for it makes valuable suggestions regarding desirable programs for medical meetings. Though distance and time will necessitate the cancellation of national meetings and though those not in service are likely to be overworked, every effort should be made to provide interesting and instructive programs for meetings which can be held such as those of the county and regional societies and of the hospital staffs.

# MEDICAL ECONOMICS

**Edited by the Committee on Medical Economics**
**of the**
**Minnesota State Medical Association**
**George Earl, M.D., Chairman**

## CO-OPERATIVE MEDICINE SPEAKS ITS MIND

Leaders in the coöperative movement from all over the country met in convention in Minneapolis last month and devoted full attention at several sessions to coöperative plans for prepaid medical service.

Several personages of note among the small group of pioneers who have extended the coöperative idea to medical service were present. Among them were Dr. M. D. Ogden of Trinity Hospital, Little Rock, Arkansas, Dr. A. L. Curtin of the Milwaukee Medical Center, Milwaukee, Wisconsin, and Dr. J. P. Warbasse, president emeritus of the Coöperative League of the U. S. A. and director of the Group Health Association of New York.

It was obvious in the day's discussions that all is not clear sailing among the medical coöperatives; that the same problems which confront prepayment plans sponsored by medical societies are puzzling the lay coöperatives; that, as a group, these people in their optimism are likely to discount the difficulties detected by the clear cold eye of the actuarial expert; that the attitude of physicians everywhere baffles them.

### Educating Doctors

How to educate the doctors and bring them into line occupied considerable discussion time. How to educate the public also appears to be a hurdle. Not only must the public be convinced of the desirability of socalled budget medicine but subscribers must be taught how not to abuse it. In fact, the problem which confronts them and all insurers for medical expense is tremendous. Most of them are convinced, however, that the coöperative is the simple and obvious solution of all problems.

Education of the public was considered in an optimistic spirit. Education of the doctor was somewhat less hopefully discussed.

### "Medical Man Has Quirk"

Said Dr. Curtin, whose Milwaukee Center has been officially opposed for years by the Milwaukee Medical Society:

"The medical man has a peculiar quirk in his make-up. He has been taught to believe that budget medicine is socialized medicine—and that, of course, really means state medicine. Actually, budget medicine carries with it a change only in economic aspects and methods of payment for services. It leaves scientific requirements unchanged and allows to the profession all the rights and dignities connected with complete control of medical procedure.

"It is admittedly difficult," said Dr. Curtin, "to make your average doctor see that, because he has been taught to study nothing that does not emanate from Leland (God of Medical Economics) of the American Medical Association. If he can be persuaded to break loose he will find that the budget medicine or socialized medicine, in this sense, holds a great appeal, especially for the general practitioner. It is possible that some specialists are overpaid. But the general practitioner, at least, is greatly underpaid in comparison with officials of corporations. It should be our special problem to show the general practitioner that it is to his advantage to practice budget medicine and that fee-for-service medicine is becoming more and more difficult to finance.

### Must Recognize People's Rights

"We doctors frequently make the statement that we, and we only, know what the people need and how we should be paid for our services," Dr. Curtin further declared. "Doctors do know what treatment the people need but they must recognize the right of the people themselves to plan how they are to pay for that treatment."

"Education of subscribers is also essential," he said. "People must be given explicit information about the service offered, who is to give it and what it is to cost. Prices for services must not be lumped with costs of materials. People must know their rights and privileges and their responsibilities and what recourse they have in case of infringement. Inevitably a few will abuse their privileges and others won't use them at all.

### Deductible Amount Bad Practice

"It is wrong to tell people that you offer a complete service because there aren't enough doctors or hospitals

anywhere to offer a complete service. Tell them instead that you offer adequate and efficient medical care and such care must include preventive medicine from the cradle to the grave. In Milwaukee we strive to get everybody in for periodic checkups. We feel that the periodic examination counts in reducing home calls and lessening turn-over.

"We have found the deductible amount (initial cash payment before benefits are available) is bad practice. It raises a barrier and stops people from coming in early for treatment. Above all," Dr. Curtin asserted, "we must not offer cheap medicine because cheap medicine is expensive at any price. Budget medicine must be good medicine offered at a fair price with a method of payment which is not painful."

### Doctor Hannah Disagrees

The question of periodic physical examinations brought some disagreement, however, principally from Dr. J. A. Hannah of Toronto, Director of the Toronto insurance plan, which is sponsored by the medical society there. This plan utilizes all physicians and existing facilities, in contrast to the Milwaukee plan directed by Dr. Curtin, which hires a staff to care for its subscribers.

Dr. Hannah approached consideration of periodic examinations from a notably realistic point of view.

"Experience has shown," he said, "that only about 15 per cent of those who present themselves without noticeable symptoms for examinations do actually have some disease that can be discovered in the course of the examination. If the public can pay 100 per cent for a 15 per cent return on physical examinations all right. But these examinations must be paid for in addition to the premium for other service or your financing will be insecure."

### Immunization to Health Departments

The question, Can budget medicine take on other phases of preventive medicine, such as immunizations and nutrition work, provoked much discussion but the answer, generally, was "No." These phases of disease prevention belong properly to health and welfare departments in cooperation with physicians, it was pointed out. Budget medicine cannot undertake to provide food or cod liver oil. To detect malnutrition and direct its correction is part of the work of the doctor but to provide correctives will add to the cost or take away from service which is the essential job of medicine.

It was suggested that clinics provide services on a more economical basis and are therefore essential to budget medicine. Dr. Hannah, with five years of experience back of him to prove it, declared, on the other hand, that efficient care can be given through existing facilities including private practitioners of the subscriber's choice.

### Toronto Experiences

In Toronto they have paid their bills and built up a reserve. Dr. Hannah therefore believes their system is good. It does not yet provide the maximum service for the minimum fee, however, and for that he gives the following reasons:

"The public doesn't know how to use the plan properly for one thing," he said. "We paid out $12,000 just to satisfy curiosity at first. The subscriber paid his dues and then dropped in on the same trip to see his doctor, on any trumped-up excuse, just to see if the plan worked. We were obliged to move away from the doctors' building to stop that. Furthermore, equipment is not adequately used. There is no economic soundness in having five x-ray machines in five doctors' offices, side by side. I would like to see existing facilities of medicine used far more efficiently than they are at present. I would also like to see doctors working together more closely than they are now so that they can let each other go at intervals for post-graduate training without endangering their practices. When they do and when they solve the equipment problem, the picture will be different. Clinics can do both, of course. But clinics are not proof against sending in extra, unwarranted bills. The fact is that neither the profession nor the public has seen the problem," Dr. Hannah concluded. "We're just cutting our teeth in this matter and sometimes we have to bite in painful spots. We're still learning and we must approach our problems in a patient manner. Certainly the profession is no more stupid about it than the public itself."

"I am impatient with the doctors as an organization," he said, "for their unwillingness to see the point of view of laymen and the propriety of a lay organization to handle medical bills.

"At the outset, we proposed to make an arrangement for medical service through a single clinic and kicked our heels for a whole year before the county medical society disapproved and the clinic found itself unable to go ahead.

### "We Kicked Our Heels"

Mr. George W. Jacobson of Saint Paul, Executive Secretary of Group Health Mutual, first coöperative prepayment plan to establish itself in Minnesota, was obviously disgruntled as a result of his own efforts to arrange medical service for Group Health in Minnesota.

### Prefers Clinics

"Subsequently we were obliged to use the indemnity method by which any clinic or physician could give the service. It's a kind of glorified accident coverage. (Note: Group Health Mutual is now selling two pol-

icies, one dealing only with medical service from clinics and the other giving the subscriber limited service with free choice of physician.) We prefer to deal with clinics because we find clinic men as a rule better educated to the public need and better trained to efficient use of equipment.

"It is difficult to see how people can get the care they need under the present fee schedules," Mr. Jacobson said. "The only way to meet the situation is through organizations in which laymen have something to say about the economic approach. Doctors, of course, fear that fees will be cut under such a plan. That may not be the case. To date, there are too many unknown factors to permit putting medical service on an out-and-out actuarial basis. It is likely, however, that if doctors themselves controlled all phases of the plan, more and more funds would be required for fees. Laymen should be in control of facilities."

### Personnel Troubles

Dr. Ogden discussed immediate difficulties of maintaining personnel for coöperative groups served by a hired staff in wartime. Five out of his staff of twelve at Little Rock have already been called to military duty and it is impossible to get replacements up to standard. He believes that group health coöperatives are being penalized by means of the war shortage of physicians and even accuses local Procurement and Assignment committees of releasing too many of his men for military service. The civilian within the coöperative also needs care, he declared.

### Cites Fortune Poll

Mr. A. G. Stasel, Business Manager of the Nicollet Clinic of Minneapolis, called attention to the *Fortune Magazine* survey, results of which were published in the July issue, which showed that some 73 per cent of the people questioned expressed a desire for some type of prepaid medical plan.

"It is freely prophesied," he said, "that prepaid medical service will receive a great impetus after the war. Group hospital and prepaid medical plans are regarded by actuarial experts as the most hazardous of any type of insurance for the reason that the decision, so far as benefits are concerned, lies in the hands of the insured. Some development of a mutuality of interest is essential to keep it on a sound basis of public interest."

### Doctors Are Studying

The fact that medical organizations, including the Minnesota State Medical Association, are giving the entire question of insurance against costs of sickness their careful and disinterested attention has evidently escaped these impatient organizers.

They seem to be very little aware of the scope of the studies nor of the interest displayed by the very men they criticise in every development which holds promise of easing payment of the patient's bill.

After careful inquiry into experience in many quarters, the Committee on Sickness Insurance here has not as yet seen fit to sponsor any insurance plan of its own. Nor has it lent official sponsorship to any lay group undertaking of the sort. This course was adopted with the approval of the House of Delegates of the medical association and is the result of an honest endeavor to map a sound policy for Minnesota and to avoid pitfalls that are inevitably associated with pioneering in this complicated field.

It is very evident that the difficulties of the task to which they have set themselves rest lightly upon the advocates of coöperatives. The setbacks and obstacles already encountered, they have willingly laid to what seems to them to be the general refractoriness of the medical profession.

The actual dangers inherent in lay control of medicine have obviously, and perhaps naturally, escaped them altogether. If prepaid plans for handling costs of medical care actually prove to be the pattern of the future, it is certain that physicians will not block the way; but their knowledge of medicine and of the needs of sick human beings will be the essential ingredient of success and it must be applied, even to the discomfiture of some individual undertakings, to protect American standards for care of the sick.

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## NORTHWEST CONFERENCE REVIVED

When the Northwest Regional Conference was first organized under the presidency of Dr. W. F. Braasch of Rochester in 1927, officers concerned had in mind an informal neighborly conference about affairs of mutual interest to the small group of states in this area whose population and medical problems are similar.

The conference soon lost its character as a neighborly exchange of views, however. It drew representatives from more and more states, from Colorado and Montana to Michigan and Indiana, and eventually metamorphosed into the National Conference on Medical Service, which meets annually in Chicago at the time of the Conference on Medical Education and Licensure, which

serves a purpose far removed from that of the parent group.

The need has remained, however, for precisely the type of informal organization contemplated by the founders.

In point of fact, the need for such a conference is even more acute than ever in view of events in Washington. Legislation has been introduced which requires the best thought and the most effective action of physicians to direct or adjust it, as the case may be, in conformity with interests of good medicine.

The ease with which some unwise legislation has become law of late (notably the bill permitting chiropractors to treat injured federal employes under the United States Employment Compensation Board), points to the need for efficient action. Such action may well be given direction and effect through the concerted endeavor of small groups such as this conference would provide.

The situation was presented recently to the Council and that body accordingly authorized the invitation for a new Five State Regional Conference to be held at the Lowry Hotel in Saint Paul on November 8. Wisconsin, Iowa, North and South Dakota, with Minnesota, will be represented. The new conference will be held strictly to the idea of the first planners. It will be a regional conference in fact, and it is hoped that out of it may come an effective instrument for action and exchange of opinion among kindred states.

## MINNESOTA STATE BOARD OF MEDICAL EXAMINERS

### J. F. Du Bois, M.D., Secretary

#### Ex-Chiropractor Pleads Guilty to Criminal Abortion in Saint Paul District Court

Re: State of Minnesota vs. Peter J. Stolurow, also known as Dr. Stoll.

On September 29, 1942, Peter J. Stolurow, forty-seven years of age, 2256 Sargent Avenue, Saint Paul, pleaded guilty in the District Court of Ramsey County to an information charging him with criminal abortion. Stolurow stated to the Court that his brothers and sisters and his family are all residing in California, and that he desired a chance to leave the State of Minnesota permanently. He frankly stated to the Court that it was impossible for him to keep out of the abortion racket in Saint Paul because of his general reputation for doing criminal abortions. He stated that he could be gainfully employed outside of the State at a law-abiding occupation. After a thorough consideration of the matter, the Honorable James C. Michael, Judge of the District Court, sentenced the defendant to a term of not less than two, and not more than eight years at hard labor in the State Prison at Stillwater. The sentence was suspended upon condition that the defendant

1. Immediately depart from the State of Minnesota;
2. That the defendant do not return to the State of Minnesota for any purpose whatsoever.

The defendant, who formerly was licensed to practice chiropractic and chiropody in the State of Minnesota, has a long criminal record. On April 11, 1928, he pleaded guilty to a charge of criminal abortion and was sentenced in the District Court of Ramsey County to a term of four years in the State Prison at Stillwater, serving over two years of this sentence. On April 15, 1935, the defendant pleaded guilty in the District Court of Ramsey County, to practicing medicine without a license and received a suspended sentence of one year in the Saint Paul Workhouse. On May 19, 1941, the defendant pleaded guilty to a charge of practicing healing without a basic science certificate, and paid a fine of $250. The same day he also pleaded guilty to a charge of endangering the life of a minor and was sentenced to one year in the Saint Paul Workhouse. After serving five months he was released by the State Board of Pardons. Stolurow's basic science certificate, chiropractic license and chiropody license were revoked in 1935.

While the Minnesota State Board of Medical Examiners does not feel that there is anything about the defendant's record that entitles him to any leniency, nevertheless, the Board does concur in the opinion expressed by Mr. James F. Lynch, County Attorney of Ramsey County, that the community will be far better off during the absence of the defendant than it could possibly be by having him in the city. If the defendant violates the terms of his suspension of sentence, he will be immediately arrested and required to serve his sentence of not to exceed eight years in the State Prison.

## BABIES, MOTHERS AND WAR

War is the great enemy of the home. For the home is inseparable from the family. The preservation of both is essential in the maintenance of morale. Now that we are organizing an army of millions, home and family are called upon to make sacrifices. Young married men must leave the fireside to fight for what they hold most precious, and, often enough, wives who are about to become mothers—wives whose plight is pathetic partly because they are too inexperienced and too poor to care for themselves, partly because from one-third to one-half of our doctors must join the colors, partly because the maternity wards of hospitals are already overcrowded.

A problem which was acute even in peace is accentuated by the exigencies of war. Fortunately the Children's Bureau of the Department of Labor under Miss Katharine Lenroot's able direction has done notable work in assisting State health agencies. The sum allotted for the fiscal year 1943 is only $198,000—obviously far too small. The Maternity Center Association has stepped into the breach. For ten years it has done its best to make the entrance of infants into this world a safe and happy event. Its Lobenstine School, the first of its kind to train nurse-midwives, has sent its graduates to almost every State and even to far-off China. Though its budget cannot stand the strain, it has now taken over the Berwind Free Maternity Clinic, formerly operated as a teaching center for medical students by New York Hospital. So insistent are the demands of mothers-to-be in these critical times that financial considerations had to be abandoned in the hope that the public would make good a budgetary deficiency and thus endorse an expansion which is indispensable.

Hard as it is to pay taxes, buy defense bonds and support charities that have a legitimate claim on our purses and our hearts, there is no task more urgent than that which confronts the Maternity Center Association. Every dollar contributed to its fund is a dollar that will help to safeguard mothers and babies in the most trying days of their lives.—Editorial, *New York Times*, June 2, 1942.

# INDUSTRIAL HEALTH



## WORKER FATIGUE

The fatigue problem in industry assumes a great importance as war production steps up to unprecedented levels in the United States today.

Results of extensive studies and comparisons, reported in *War Medicine* recently by Dr. R. R. Sayres of the United States Public Health Service, have shown clearly that fatigue is not solely the result of work done. It is also dependent on the worker's susceptibility to fatigue, a fact which varies from man to man and in each individual from day to day.

These findings are gathered from studies made over a long period in many large industries, and most impressive among conclusions drawn from them is the universal truth that the better the working conditions are, the greater the production will be and the smaller will be the costs due to accidents, absenteeism, turnover and compensation payments.

### Plant Physician Responsible

Reduction of fatigue so far as the plant is concerned is a matter, in most instances, of introducing rest periods, of keeping working hours within reasonable limits with one day's rest in seven, and of good work conditions, including good lighting, heating and ventilation, and adequate plant medical service.

There are great advantages, measured in terms of production and of lowered costs, in supervising the living conditions of workers at home, as the experiment carried on over a period of years by the St. Joseph Lead Company has shown. The St. Joseph Company undertook to provide the kind of homes and advantages which would permit all of their workers to raise families satisfactorily and to send their children to good schools. The return in reduced turnover alone showed a clear profit. But that kind of worker-protection is largely out of the question during wartime. At the same time, plant precautions against overwork and ill health are more essential than ever and should be part of the responsibility of every physician who in any way serves the industrial effort.

### Rest Periods Increase Production

The importance of rest periods during necessarily long working hours has been thoroughly demonstrated. The fact is that rest periods will be taken, whether or not, during long spells of work and no discipline can eliminate the effects of fatigue. But rests sanctioned by the manager have been found to have far greater recuperative effect than those taken surreptitiously by the workers. Also, involuntary rests due to breakdowns or to inadequate supplies are apparently only one-fifth as valuable in relieving fatigue as voluntary rests.

Among experiments cited to substantiate these observations is one undertaken by an Eastern textile mill. Employes were given 40 minutes a day to be taken in four regular periods in which they were to lie down and rest. Spinning mules were shut down completely during the ten-minute periods but, in spite of that, production was up 10 per cent in a month.

Personal susceptibility to fatigue is determined by four factors as shown in these studies: the individual's constitution, his habits of muscular use, the environment under which he works and the nature of his task. A man's constitution may vary; it may be weakened by disease and strengthened by adoption of good habits of living. For a given task he may have formed habits that use more movements and keep his muscles under greater strain than are demanded by the nature of the work. Rhythm is a fundamental property of the nervous system and the building up of a series of rhythmic reflexes with no unnecessary movements is a potent factor in preventing fatigue. Unfavorable environmental factors include poor ventilation, excessive temperature and humidity. The nature of the task is an important

*(Continued on Page 943)*

# I'M IN THE AIR CORPS NOW

**CAPTAIN C. KENNETH COOK, M.C.**

**9th A.F.S.C., Patterson Field**

**Fairfield, Ohio**

The article "I'm in the Navy Now," by Lieutenant Commander Edward Dyer Anderson, which appeared in the June, 1942, issue of MINNESOTA MEDICINE, has prompted me to submit a similar viewpoint from the Medical Department of the Air Corps in the hope that it might hold some interest for those who may contemplate service in this branch of the armed forces.

I am a novice at this game as are the majority of the men who are associated with me. We have, however, learned a great many things that concern the Medical Officer assigned to the Air Corps.

Having applied for service with the Medical Department of this Corps and presuming that things at home have been made partially ready for the day when orders are to be received, let me start from the day when orders arrive, assuming that you have passed your physical examination Form 63, and have made application for a commission in the Medical Department of the Air Corps.

A preliminary notice of commission will arrive with the probable date of orders and the name of the field to which you will be assigned. Within a few more days the orders will be received and about ten to fourteen days in advance of the effective date for your reporting to active duty.

Now come decisions that you will be forced to make for yourself hurriedly and, I hope, correctly. First, do not plan on bringing your wife or family. Leave the furniture, for you will find that suitable quarters are few and far between, and after they have been located you can transport the things that have been left behind. Bring your car for you may find that eventually you may have quarters fifteen to thirty miles from the field. You will be able to share rides at times and transportation facilities are already overtaxed. Your car may have to be disposed of at a later date rather hastily, but as a rule, this has not been a major problem.

Travel light for most of your civilian belongings have no place in this branch of the service. Underwear, pajamas, handkerchiefs, razor, shaving soap and brush, toothpaste and brush, comb and brush, soap, pen and pencil, and such are the only necessities that you will have that can be used.

When you arrive at the field you will be stopped by the civilian guard at the gate and upon showing your orders will be directed to Headquarters.

At Headquarters you will be given the following list of procedures to carry out and while these will vary with each field, they are in general as follows:

1. Sign the register at Headquarters.
2. Report to Chief Clerk and fill out officer's personal data sheet.
3. Report to Post Adjutant with copy of orders assigning you to the post.
4. Report to mailroom requesting assignment of mailbox.
5. Report to identification unit for identification badge.
6. Report to Finance Officer.
7. Report to Civilian Guard House for auto identification tag.
8. Report to organization to which you are assigned for duty.
9. Report to hospital for immunization register.
10. Read and initial Officers' Bulletin Board at Headquarters daily at specified time.

Now that you are officially in and assigned you will be given time to locate living quarters. This may prove to be a great problem. Eventually, with all the help you can get from your fellow officers, you will succeed in finding something, probably not what you had hoped for, but something that will do.

Your assignment to new duties which have been arranged for you will follow. These may bear some similarity to something that you have done previously, but the chances are that they will be entirely foreign to any personal experiences.

You will find your superior officers kind, courteous, willing and ready to give you advice from their own information or experience. The new associates you will have are men from all specialties, groups, and sections of the country and are more or less confused at all of the new activities and duties that have been assigned to them. You will have to be photographed and fingerprinted for a pass from the Adjutant General's Office, the local field pass, and for officer's files. There are blanks for "dog tags," officer's qualifications, various data sheets, travel and uniform allowances, transportation or storage of furniture, and vouchers to sign to put you on the payroll.

These are just some of the things that unravel as you go along and are mixed in with various shots of typhoid, tetanus, cholera, plague, yellow fever, blood typing and smallpox vaccination. In case you get to feeling too well, these tame you down again.

While personal qualifications and professional ones are taken into consideration, you may find that an obstetrician or pathologist is doing physical examinations; a surgeon may be in charge of a venereal treatment and prophylaxis station, and so on. After all, we are all primarily M.D.'s.

Men who are not placed directly on the hospital staff or examining unit may be sent to school locally or to some other field for a special course of instruction. Local training usually consists of a course of Medical Administration and the various and sundry records that are involved. Courses to familiarize you with map reading, field administration, first aid, gas masks and the various gases and their smell, behavior, duration, etc.; the service pistol, its use, construction and operation; field sanitation and the means of carrying it out in different forms and under various conditions; routine inspections of health and of sanitation and dozens more; also a moderate amount of drill.

A certain number of men upon completion of this

training are assigned to Air Depot Groups which are in reality complete portable hangar service for combat planes. They consist of Headquarters, Supply and Repair Sections and have complete Medical and Dental, Mess and other groups to make them self-supporting and self-contained units of from eight hundred to one thousand men. The purpose of these groups is to service, repair, salvage, and maintain all types of aircraft, and to keep both men and planes at a peak for continuous and efficient operation.

You will soon become impressed with the magnitude of the whole situation and the very small tooth that you are in one of the numerous gears that operate this immense machine. Financially it is not what yau have probably had before, but when you consider that you and your many associates are doing the best that you can under situations that may be far from ideal, most of which have little or no bearing on any previous experience, there is really definite satisfaction in knowing that we are each trying to keep our men the best Flying Force in the world and to "Keep 'Em Flying."

Personal ties are few and when you get out of line you hear about it so that you do not violate regulations again. Ignorance is not an excuse. Your superior officers are men who have been through the same thing or are more experienced. Coöperation is splendid. Complaints are few. Work is hard, interesting, new, voluminous and regular. Results are what count *and we do the best we know how,* with what we have on hand; smile, laugh and do today's job as fast and well as we can.

Ours is a small part in the big job of winning a war and we *must,* and we *will* "Keep 'Em Fit to Keep 'Em Flying."

NOTE: Opinions and material in this are my own and are in no way to be taken as having any official expression of the Air Corps. Released for publication by the Bureau of Public Relations, War Department, Washington.

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## WOMEN IN THE WAR EFFORT

A protest against the employment of expectant mothers in war industry is voiced in the October issue of *American Journal of Obstetrics and Gynecology.* "Recent promulgations from official sources indicate a necessity for this enlistment of women in war industries," comments the *Journal* in its Article, *Women in the War Effort.* "The results of their labors seem to have proved of great value and their induction into factory and similar employment is believed to release many men for the combat forces. If this constitutes a part of the necessary effort to win the war, we should accept it. In doing so, however, we must divorce from the movement any possible underlying element of glamor and choose as participants those women whose entrance into labor would not disrupt their obligations towards society and the family . . ."

The plan of encouraging mothers to stick to their job by providing for their special care in the factories is condemned as follows: "Why should pregnant women be employed at all in hazardous occupations or any others that make demands on physical resources which should be devoted to carrying out her foremost obligation to society? For years we have been developing methods to protect her during this all-important period, and now we are urging her to expose herself to a possible interruption of her child-bearing function.

"This war is defined as a total war. Consequently it includes everyone, perhaps indiscriminately, including men, women and children. In our efforts, however, to bring it to a successful conclusion, we must weigh carefully what each group can do to achieve that end and in the meanwhile to preserve, so far as woman is concerned, her particular function in our social economy. This applies above all to her place as an expectant mother. *Pregnancy may eventually prove more worthwhile than making bullets.* Whatever problems may be involved, they demand attention and the possible solution must be based on reasoned study and not hysteria. Physically-fit women, married or unmarried, and free from family ties, should, in our vast population, be found in sufficient number to rule out a resort to pregnant women in our expanded program of war industry."—*Briefs* (Maternity Center Assn., New York), October, 1942.

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## SELECTIVE SERVICE EXAMINATION REVEALS LESS ALCOHOLISM

It is encouraging news to everyone who enjoys spiking the "decadent democracy" arguments of the Axis, that only twenty-one men out of 19,923, or 1.1 per thousand were rejected for acute alcoholism under the selective service system, stated James H. Oughton, head of the alcoholic research bureau of The Keeley Institute, Dwight, Illinois.

It is good news, says Oughton, because Keeley statistics, based on a half million patients treated during the past sixty-five years, when this "decadent democracy" built up the West, laid the railroads, won the Spanish-American war, and helped win the last World War, show that the national average for alcoholism was even higher than it is today.

But lest Americans grow too cocky over the sobriety record of their fighting youth, Mr. Oughton offers the following sobering reminders:

Keeley Institute research reveals that to two people in every hundred, even one drink is as disastrous as a lighted match to tissue paper.

The selective service average for inebriety is lower than that of the national average because the typical alcoholic has been drinking steadily for ten years. Alcoholism, on an average, evidences itself among men in the thirties, forties and fifties. Physical examinations of men under selective service applied to younger groups.

Fourteen men per thousand were rejected under selective service for kidney trouble, and 100.4 per thousand for heart disorders. Indulgence in liquor is probably responsible for some of these cases, said Oughton as well as some cases of gall-bladder trouble, indigestion, nervousness, and insomnia.

# ★ In Memoriam ★

### GEORGE F. BROOKS

Dr. George F. Brooks, well-known eye, ear, nose and throat specialist in Saint Paul and lately of Stillwater, died October 7, 1942, at his home at Marine after a lingering illness. He was sixty-four years old.

Dr. Brooks was born in Brownsville, Minnesota, March 23, 1877. After attending Shattuck Military Academy he received his medical degree from the University of Minnesota in 1900. Following graduation he practiced in Hibbing. After serving in the Medical Corps of the army during World War I he took postgraduate work in eye, ear, nose and throat in Chicago and was associated with Dr. Frank E. Burch in Saint Paul. In 1932 he moved his office to Stillwater where he was a member of the staff of the Lakeview Memorial Hospital. He lived at Marine-on-the-St. Croix He is survived by his wife, Margaret.

During the past ten years Dr. Brooks was several times president of the Washington County Medical Society. He was known to his associates as a clean-cut gentleman whose honesty was never questioned. What more can be said of a man?

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### LAWRENCE F. EDER

Dr. Lawrence F. Eder, a native of Blue Earth, Minnesota, died October 11, 1942, at his home in Santa Barbara, California, at the age of forty-two. Dr. Eder graduated in 1924 from the University of Minnesota Medical School and had attained prominence as an obstetrician and surgeon. He had many friends and acquaintances in Minnesota.

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### EDWARD P. HAWKINS

Dr. Edward P. Hawkins of Montrose, Minnesota, was born in Hancock County near Carthage, Illinois, August 9, 1863, the son of William R. and Julia (Wright) Hawkins. At an early age he came with his parents to Carver County, Minnesota, and attended nearby public schools.

In 1887 he graduated from Battle Creek College at Battle Creek, Michigan, and on January 15, 1889, married Vesta D. Miller, a college classmate. After three years during which he and his wife taught school he studied medicine at the University of Michigan where he received his medical degree in July 1, 1897.

In October, 1897, Dr. Hawkins located at Montrose. As his practice grew he established a hospital there in 1903. This was incorporated into a training school for nurses in 1914.

Dr. Hawkins was an earnest Christian and being a strong believer in prayer he on occasion offered prayer for grace and guidance before performing an operation. This brought assurance to his patients in their hour of trial.

Since 1920 Dr. Hawkins has spent his winters in Miami, but always looked forward to returning each spring to his home and garden in Montrose.

A year ago Dr. Hawkins suffered a severe heart attack and in spite of spending the last winter in Florida did not fully recover. The end came on September 28, 1942. He is survived by his wife; a daughter, Mrs. E. F. Willett of Mt. Vernon, Ohio; two grandsons, Edward Ferrand, Jr., and Robert Lee Willett; one sister, Mrs. Martha E. Fuller of Long Island, Alabama; and a brother, Grant Hawkins of Lodi, California.

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### SHERMAN SEDGWECK HESSELGRAVE

Dr. Sherman S. Hesselgrave was born in Sibley County, Minnesota, January 18, 1872. His father, Robert V. Hesselgrave, and his mother, Amanda Livingston, came to Minnesota from New York and settled on a claim near Arlington, Minnesota, in 1854.

Dr. Hesselgrave attended the Jefferson School and the Central High School in Saint Paul and graduated from the Medical School of the University of Minnesota in 1894. He, along with Dr. Sherwood, took their internships at St. Joseph's Hospital, following Dr. Harry J. O'Brien who was the first intern in the hospital. In 1897 he married Marie Elizabeth Greget. Dr. and Mrs. Hesselgrave visited her native France and other European countries in 1908.

Dr. Hesselgrave was on the staff of the Luther Hospital which was later known as the Saint Paul Hospital, where he collaborated with the late Dr. Eduard Boeckmann in perfecting the transverse abdominal incision. The subject was written up as "Rational of Transverse Abdominal Incision" by Dr. Hesselgrave and published in the *Saint Paul Medical Journal* in December, 1910. Dr. Hesselgrave at one time was also on the staff of the Midway Hospital.

During World War I he served as Lieutenant in the Medical Corps of the United States Army. After the war he received a commission in the Reserve and was commissioned Lieutenant Colonel in the Reserve in 1932.

In 1936 Dr. Hesselgrave moved his office from the Lowry Building to his home. Since that time he had served as a medical officer in a CCC camp for six months and practiced at Remer for some time. He also spent a winter in Babson Park, Florida, where he looked after his citrus grove which had been his hobby for twenty years. In 1941 he resumed practice in Center City, where he lived at the time of his death.

Dr. Hesselgrave was a member of the Ramsey County Medical Society for forty-three years and of the Minnesota State Medical Association for forty-five years. He

was a Mason and also a member of the Central Presbyterian Church in Saint Paul. Hunting and fishing were his best loved pastimes. He is survived by his wife and one sister, Mrs. H. L. Bullis of Oceana, Virginia, and a nephew, Richard Hesselgrave of Saint Paul.

### EDWARD LEROY KANNARY

Dr. Edward LeRoy Kannary of Saint Paul died September 23, 1942, at St. Luke's Hospital following a comparatively short illness.

Dr. Kannary was born in Greenvale, Minnesota, on March 11, 1872, the son of Michael Kannary and Lavina Bates Kannary.

He attended the country school adjoining the farm and received his high school education at Northfield. After spending three years at Carleton College, he entered the University of Minnesota, where he graduated in 1897. That same year he enrolled at McGill College of Medicine in Montreal, Canada, and received his degree in medicine in 1900, completing the four-year course in three years.

Following graduation, due to his high scholastic record, he received an appointment as physician and surgeon on an ocean liner where he served two years on trips through the Orient. He then took six months' postgraduate work in Vienna, specializing in diseases of the skin.

In 1904 Dr. Kannary located in Saint Paul where he was always regarded as one of the leading practitioners in his chosen specialty. Two years later he married Cathrine Butler, who survives him.

Besides membership in the Ramsey County Medical Society, the Minnesota State and American Medical Associations, he was a life member of the Saint Paul Athletic Club, and served efficiently as president of the Town and Country Club, being very active on the Board of Directors for eight years.

As hobbies he thoroughly enjoyed hunting and golf, not so much for the sport itself as the pleasure he derived from association with his friends.

Ever cheerful and cordial and gifted with a very unusual wit, his presence was always felt in any gathering at any time.

—C. G. Perry, M.D.

### CHARLES W. MECKSTROTH

Dr. C. W. Meckstroth of Brandon, Minnesota, died at his home October 4, 1942, after being confined to bed following a stroke suffered in January, 1941.

Dr. Meckstroth was born in Le Sueur, Minnesota, September 7, 1872. After graduating from high school in Le Sueur he attended Hamline University and later the University of Minnesota Medical School where he graduated in 1895.

He began practice at Evansville but moved to Brandon in 1901 where he practiced continually until his illness in January, 1941.

On September 20, 1899, Dr. Meckstroth married Lottie C. Johnson. He is survived by his widow and a son Orrin of Hawley, Minnesota. A daughter, Eunice Mildred, died twelve years ago.

Dr. Meckstroth held several offices of trust in Brandon, having been postmaster for a number of years and also a member of the school board. He was a member for many years of the Park Region District and County Medical Society and the Minnesota State and American Medical Associations.

### STEPHEN WALTER RANSON

In the passing of Dr. Stephen Walter Ranson on August 30, 1942, at Chicago, neurology in the United States suffered a major blow and the pioneer tradition in medicine in Minnesota sustained a loss which it could not well afford. Dr. Ranson, a pioneer in certain aspects of American neurology, was the son of the first physician to settle in Dodge Center, Dr. Stephen William Ranson (1843-1904), who came to that railway village in June of 1870, and lived there for the rest of his life. He was a fast friend of such eminent Minnesota pioneers in medicine as Dr. Justus Ohage (1849-1935), Dr. William H. Mayo (1819-1911), Dr. Perry H. Millard (1848-1897), Dr. James Henry Dunn (1853-1904), Dr. Frederick A. Dunsmoor (1853-1930), and scores of others famous in the annals of medicine in Minnesota. The son was born there on August 28, 1880, and grew to manhood there. He received the degree of Bachelor of Arts from the University of Minnesota in 1902, that of Master of Science from the University of Chicago in 1903, that of Doctor of Philosophy from Chicago in 1905, and that of Doctor of Medicine in 1907. From 1904 to 1906 he was a fellow in neurology at the University of Chicago; in 1907 and 1908 he served his internship in the Cook County Hospital; in 1909 and 1910 he was an instructor in anatomy, from 1910 to 1912 he was assistant professor of anatomy, and from 1912 to 1924 he was professor of anatomy and chief of the department, in the Northwestern University Medical School. From 1924 to 1927 Dr. Ranson was professor of neuro-anatomy and histology in the Washington University School of Medicine in Saint Louis; but in 1928 he returned to Northwestern as professor of neurology and director of the notable Neurologic Research Institute of that university, a post which he occupied at his death. An editor of the *Archives of Neurology and Psychiatry*, Dr. Ranson also had written much on neurology. He was particularly interested in research concerning the structure and functions of the peripheral nervous system and of the hypothalmus. In 1929 the Stephen Ranson Lectureship in Medicine was created to honor him at Northwestern University. In 1936 he was the Harveian lecturer before the Harvey Society of New York, sponsored by the New York Academy of Medicine. He spoke on December 17, 1936, on "Some Functions of the Hypothalmus." One of his best-known works was his *Anatomy of the Nervous System*, published in seven editions, which he was revising at his death. He had contributed more than 160 papers to medical literature. He was a member of many scientific societies, including Sigma Xi, Association of American Anatomists (of which he was president from 1938 to 1940), American Association for the Advancement of Science, American

Physiological Society, and the Association for Research in Nervous and Mental Diseases. The 1940 volume of the last-named society, *The Hypothalmus and Central Levels of Autonomic Function,* was dedicated to Dr. Ranson.

On August 18, 1909, Dr. Ranson was married to Miss Tessie Grier Rowland, of Oak Park, Illinois. Several children were born to them.

Dr. Ranson died in Chicago, of coronary thrombosis, on August 30, 1942. Funeral services were held at the Fourth Presbyterian Church in Chicago on Tuesday, September 1, 1942, in the course of which Dr. James Roscoe Miller, dean of, and associate professor of medicine in, the Northwestern University Medical School, observed: "As one of a group of friends and colleagues who have had the rare privilege of his friendship, company, and counsel; as an acquaintance of the family, I have had the opportunity to know and to admire; as one of thousands of students to be found in every quarter of the globe who have knelt at his throne; as a representative of a University made infinitely greater by his having been a member of its faculty, and, lastly, I speak for all mankind and for those who are to follow through the ages in expressing our gratefulness for what this Great Man has given us."

A sister, Dr. Mary Eliza Ranson (Mrs. A. Franklin Strickler), of Sleepy Eye, Minnesota, and Long Beach, California, survives him. A brother, Dr. George Ranson (1871-1899), died at Saint Peter in 1899, in the course of active practice.

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## SUICIDE AND WAR

Along with its unspeakable evils, war does beget some changes which have a beneficial aspect. Some of these are essentially material—technological advances hastened by the pressure of urgent necessity, surgical and medical progress at an accelerated pace in the face of terrible emergencies of the battlefield. Less obvious on the surface, though striking deep, are new reactions in mind of a certain type. It is a commonplace in mental hygiene that it is healthy for the individual to forget himself by immersion in issues transcending his own petty, personal complaints. So comes about the singular paradox that in times of war a symptom of worry, discouragement, and despair—suicide—is actually found to become more rare than in peacetimes. Not only various national figures, but the records of the Metropolitan Life Insurance Company as well, show the evidence.

The death rate from suicide among the Company's policyholders this year is practically the same as last year's figure, and is with one exception the lowest on record. For 1941, as a whole, the rate dropped sharply from the preceding year. This phenomenon of an exceptionally low suicide rate is attributable largely to the psychological effect of the war, although the increased standards of incomes have contributed a share. A similar low level of suicide mortality is observed in England, where the rate fell consecutively from year to year between 1939 and 1941, and where the 1941 suicide rate among males was approximately 15 per cent below that of 1939. Also, there was a sharp fall in the number of suicides in the last three months of 1939, which in England marked the opening period of the war. Recent German figures also show a fall of 30 per cent from 1939 to 1941 in the suicide rate.

This decline in suicide during wartime has been observed in practically every country at war, and it is a rather curious fact that, in some instances at least, neutral nations neighboring on the belligerent countries shared in this same phenomenon. As for our own experience in the last war, not only was there a decline of 20 per cent between 1917 and 1918, but the downward trend began in 1916 and continued through 1920. Between 1915 and 1920 the decline was more than 50 per cent. While there was some rebound from these low levels after the war, the suicide rate has never returned to its pre-World War level, not even during the economic depression in the 1930's.

The lowering of the suicide rate in war is so marked and so universal that the list of instances could be lengthened considerably. The interest, however, is not in such a list of figures, but in the evidence which they bear of one favorable psychological effect of war. A national clamity acts as a uniting force. The needs of the country become of paramount importance, and the petty interests and difficulties of the individual tend to be forgotten in the urgent desire to aid the Nation in a time of crisis. Many sensitive individuals whose lives seem to lack purpose become absorbed in rallying to the defense of their country. Men live for the present and worry less about the future, especially as, during war, new channels of activiity are opened. The demands of the military forces for material cause a sudden spurt in production and money incomes. Thus economic and psychological forces work together in the same direction for the benefit of the Nation's state of mind.—*Statistical Bulletin, Metropolitan Life Insurance Company,* Vol. 23, No. 9, September, 1942.

# MINNESOTA STATE MEDICAL ASSOCIATION

## Eighty-ninth Annual Session

### June 28, 29 and 30 and July 1

### Duluth, Minnesota

## HOUSE OF DELEGATES

### Sunday, June 28, 1942

The first meeting was called to order at 2 p.m. by Speaker W. W. Will.

Following a report from Dr. E. C. Bayley of Lake City, chairman of the Committee on Credentials, that a quorum was present, it was moved, seconded and carried that the reading of the minutes of the last meeting be dispensed with and, at the request of the Speaker, Dr. Gunnar Gundersen, president of the Wisconsin State Medical Society, addressed the delegates.

DR. GUNDERSEN: It is very interesting to note that your problems are very much the same as ours are in the neighbor state. We have the same type of background, we are interested in the same things and have more things in common than the adjacent states of Michigan, Illinois and Iowa. There has always been a healthy spirit of coöperation and competition between us, especially since the time eight years ago, when your president, Dr. Coventry, was from Duluth and our president was from Superior. I bring the greetings of your sister society and best wishes for the success of your association and this meeting.

The Speaker then called on Dr. S. E. Gavin of Fond du Lac, chairman of the Council of the Wisconsin State Medical Society.

DR. GAVIN: For many years I have heard about the organization in Minnesota and I believe we have adopted many of your streamlined procedures in the conduct of our society. There is no question that we have many things in common. According to the last AMA directory you have about twenty-five more licensed physicians but about 200 more members so you undoubtedly have something on the ball that gets you this increased membership which we have not as yet attained. In matters of legislation, medical economics and social relations we both probably follow along much the same paths. It is perhaps more important right now for men to be on the alert than at any other time in our history. We have been involved in handling legislation that is more radical, I believe, than any presented in Minnesota but the contact between the states is so close that such legislation may easily spread from one to the other.

There is little time during the war period for us to lay out the future of medicine when the war is over. We are completely concerned now only with winning the war. At the same time we must be on our guard. There are men and bureaus in this country whose ideas are not in the best interests of the medical profession and it does not require a great deal of discernment, in spite of assurances of men high in the government, to realize that plans are already taking shape to bring medicine under government control. With the undercurrent of hysteria which involves everything in these times it would take the merest spark to start a conflagration that would plunge us into types of state medicine detrimental to the welfare of the public as well as the profession.

Speaker Will called for the report of the Chairman of the Council, Dr. W. L. Burnap of Fergus Falls.

Dr. Burnap announced that he would dispense with the reading of the annual report already in the hands of the delegates and reported as follows on the Council meeting held in the morning of the same day:

### REPORT OF COUNCIL MEETING

The bank balances for last year and the statement of budget expenditures was approved, the only change being an addition of $1,000 to the budget of the Public Health Education Committee to cover unexpected additional expense for the packet-of-the-month program which has doubled in demand from the membership this year. Also additional funds were allowed to cover expenses of delegates to the Atlantic City meeting of the AMA.

Certificates and lapel buttons for the Fifty Club (to be inaugurated at the banquet Tuesday night) were approved.

A gratifying increase in the amount of vaccine and toxoid distributed throughout the state was reported by Dr. A. J. Chesley, secretary and executive officer of the State Board of Health.

At the request of Dr. V. O. Wilson of the Division of Maternal and Child Health of the State Board of Health, the Council appointed a committee consisting of Dr. R. L. J. Kennedy of Rochester, chairman of the Committee on Child Health, Dr. R. J. Moe of Duluth, Chairman of the Committee on Maternal Health, and Dr. E. J. Simons, Chief of the Medical Unit of the Division of Social Welfare and Dr. W. A. Coventry of Duluth, chairman of the Committee on Low Income and Indigent Problems, to confer with Dr. Wilson and report at a subsequent meeting on the program proposed by the Children's Burea for medical hospital obstetrical and pediatric care for wives and children of men in military service.

The annual complete report of the activities of the State Board of Medical Examiners was presented to the Council by Dr. A. W. Adson of the board. This report is on record in the State Office and may be examined by any interested member.

All physicians owning diathermy machines are required to register them with the government on a blank which can be secured from the Federal Commission at the old Post Office building in Saint Paul. This matter was brought to the attention of the Council and is now transmitted to the delegates at the request of the Council.

Other routine business included approval of mail votes by the Council, of coöperation in the continuation course on Child Health at the University Campus in which the Committee on Child Health acted as sponsor and many representatives of component societies attended; acceptance of affiliate memberships for Drs. H. J. Lloyd, Mankato; R. L. Windsor, Fergus Falls; G. F. Reineke, New Ulm; C. E. Johnson, Pine River; J. D. Watson, Minneapolis; invitations to two national associations, the American Association of Mental Deficiency and the American Society of X-Ray Technicians, to meet in Minnesota.

The most important discussions and action taken by the Council at this meeting involved the question of dues for men who have gone into active military service. Upon motion regularly seconded, a committee consisting of Drs. A. W. Adson, L. A. Buie, S. H. Baxter and F. J. Elias, was appointed to embody the conclusions reached as a result of these discussions in a resolution to be presented to the House of Delegates.

Permission of the Speaker to present this resolution for consideration of the House immediately was requested by Dr. Burnap.

The Speaker called for a resolution permitting the House to go into immediate session for new business. Upon passage of this resolution he called upon Dr. Adson to present the matter to the delegates. Dr. Adson reviewed earlier action by the delegates and the Council with respect to payment of dues for men in service. This action, in brief proposed to county and district societies that the societies pay dues of their own members if possible and if the members themselves could not pay their own dues. If the societies were unable to take such action, state dues of members below the grade of captain were to be remitted subject to approval in each case by the Council.

DR. ADSON: Many county societies assumed the burden of dues for their members in service but as more and more were called to active duty the burden became heavy for the larger societies with larger dues to assume. Furthermore, many men in the service felt that their dues should be remitted in that colleagues at home would inevitably profit by increased practice in their

absence. Also the majority of other state associations were following the policy of remitting dues for all who enter military duty regardless of rank.

It is obvious that waiving of dues for all men who go into service presents a serious problem to the state association. Normally there are 2,700 dues-paying members in the association of whom more than 500 are now in service, with the prospect that approximately a third will be in service soon if demands for December 31, 1942, are met. Thus the annual normal income of the society is approximately $37,000 and that income by December 31 will be cut by $12,000 or more if dues are waived. The problem, then, is how to meet the annual budget, which averages about $36,000. Overhead expense will be no less and may be more in view of some heavy additional obligations involved in Procurement and Assignment work and in added war-time educational programs.

The question is, are we to continue as an active medical organization or are we to curtail our activities? To those of us who have sat in the House of Delegates of the AMA, it is increasingly clear that we are now out in front in Minnesota. We have accomplished something we do not want to lose. Furthermore, there is a constant threat to the practice of medicine. Evidence of projected new inroads from Washington is brought to us constantly. Organization to maintain the same active program and the same careful supervision is more necessary than ever before if we are to continue as a profession. We cannot reduce our budget and maintain the same sort of effective organization. It is true that there are a few paid employes such as our Executive Secretary but most of us give our time so that medicine may live when we are gone. We all hate assessments and we dislike paying dues; but we need money and what are we going to do? Throw it back on the county societies again? For rural societies the burden may not be great but for urban societies it is heavy. If we were chiropractors we would not hesitate to dig up fifty or one hundred dollars apiece to promote ourselves. But we do not ask so much. We need in fact no more than all of us spend many times for little extra luxuries.

You may ask why the additional funds could not be taken from our reserve. Well, our reserve fund now has a book value of $44,000. If we assume the loss of $12,000 this year and perhaps more next it will be but a short time until our entire reserve has vanished. And we are going to need that reserve if we are to meet the difficulties that are being shouldered onto the practice of medicine. The alternative which seemed best in the judgment of the Council this morning is embodied in the resolution which follows and I moved that it be adopted.

WHEREAS, due to the war emergency, the Minnesota State Medical Association faces the loss of approximately one-third of its membership and

WHEREAS, there has been no unanimity, based upon previous actions of the Council and House of Delegates, as to the manner by which this loss of income is to be met, Be It therefore

RESOLVED that, beginning with the year 1943, the dues of all members who enter the service of the armed forces shall be waived for the duration of the war emergency; that their status as members in good standing shall be retained for the same period, and

BE IT FURTHER RESOLVED, that a special assessment effective January 1, 1943, is hereby levied in the sum of $5.00 per member per year during the war emergency.

Other members of the Council committee were asked to discuss the matter. Dr. Elias pointed out that dues of St. Louis County who have gone into military service have been paid by two assessments of members in spite of which there has been a deficit. He felt certain that St. Louis County members would not object to the state-wide assessment of $5.00.

Dr. Baxter pointed out that the necessity for maintaining a strong state organization is increasing; that, even if it is necessary to curtail local activities, the state association must be maintained. Many local societies that have remitted their own dues for their members in the services will be under a heavy burden. Nevertheless he believed that the resolution should be adopted to maintain the strength of the state organization whatever may happen.

Dr. Buie spoke on behalf of the special committee and also of the Finance Committee of which he is chairman.

DR. BUIE: If one-third of the paid membership should leave by January first, that would mean a loss of 846 members or $12,690 in membership dues. If that amount is deducted from the current income of more than $38,000, it will leave about $25,000. But it costs the organization about $36,000 a year to function and it is obvious that a budget of $36,000 cannot be met out of $25,000. There are lateral considerations which should be mentioned again. For instance there has been a little surplus above expenditures each year for the last few years. In 1940 the surplus was $8,000; in 1941 it amounted to a little over $2,000. Out of this accumulated income $5,000 was invested in the reserve. There were many years during good times, however, when the association failed to accumulate any surplus whatever and the outlook for any such increase in the future is highly doubtful now.

With this addition from surplus revenue, we now have a reserve of about $44,500 and, for that reason, many members have considered the financial position of the association to be impregnable. Some have even said that the reserve found was too large, that it should be used immediately as soon as an emergency arose. But with an annual deficit of $11,000 or $12,000 or even of $8,000 or $9,000, provided some additional unforeseen income is found, the financial bulwark of $44,500 will be dissipated within a few years unless this measure is adopted. The financial position of the association will then be in great jeopardy and the finance committee of the Council therefore sincerely hopes that the measure will be passed and that every delegate will undertake to explain the necessity for it to colleagues in his own society.

Dr. Burnap called attention to the fact that the additional income mentioned by Dr. Buie was derived from sale of exhibit space at the state meetings, that Mr. Rosell, executive secretary, had been very successful in making such profits from the last few meetings, but that large meetings with an extensive sale of exhibit space are probably a thing of the past. Thus it is impossible to count on this source of additional income.

Dr. Adson pointed out further that expenses are higher in alternate years due to the legislative program.

Dr. R. W. Morse of Minneapolis said that an additional assessment would have to be levied upon Hennepin county members to carry on their own county program and that the Hennepin county membership would undoubtedly ask to what extent economy in operation of association affairs could make up for losses and avoid the necessity of assessments.

DR. BUIE answered as follows: The Finance Committee of the Council has constantly and closely supervised the financial position of the association. It has been our continuous endeavor to practice economy in our program and in the office administration of our affairs. Our problem is that additional activities involving additional expense are constantly enforced upon us. It is our sincere belief that our overhead expenses are now reduced to a minimum and that there is no way to reduce them without curtailing or actually discontinuing essential parts of our program. As a member of the Finance Committee, I have been obliged to keep in very close touch with the situation and I speak with as much or more knowledge of it, perhaps, than other members of the Council.

DR. BURNAP commented as follows: We have had wonderful help all along the line of financing the state society. Mr. Rosell has unusual ability, Dr. Giffin has

checked carefully on things for years, we have committee chairmen like Dr. Buie and besides we have the help of reliable financial agents. All expenditures are carefully examined. Some which, like the packet-of-the-month, are increasing in cost, are regarded as one of the finest things undertaken by the State Association. Certainly we believe that the packet program should not be cut down. Furthermore, the prices of materials and many services has risen so that the strictest economy has been necessary to hold the costs within the budget adopted. In the opinion of the Council there isn't going to be any material reduction in the costs of carrying on the state society's work.

MR. ROSELL: I think Dr. Morse should know that some projects of the association have been curtailed but that new ones have promptly been put in our laps to replace them. For example, the paper and administrative work of the State Committee on Procurement and Assignment has added greatly to our expense but the Council has expressed itself as unwilling to accept federal money to cover that expense. It is costing us considerable money but I believe all of the doctors of the state agree that they prefer to run this business of selecting physicians for the Armed Forces themselves without the aid of the Government.

Several delegates speaking from the floor expressed themselves emphatically to the effect that they did not wish the association to be paid by the federal government.

The resolution was passed unanimously by the delegates and it was also decided, upon motion of Dr. F. J. Savage of Saint Paul, that the resolution should be sent to the men in the armed services and published in MINNESOTA MEDICINE.

The Speaker then asked for action by the delegates on the report of the Chairman of the Council. It was moved, seconded and carried that the report be accepted.

The Speaker then called for the report of the Reference Committee on Medical Education Reports, Dr. F. W. Lynch, Saint Paul, Chairman. The following reports were considered:

## COMMITTEE ON CANCER

The public education program of this committee continues to be carried on in coöperation with the Minnesota Society for the Control of Cancer.

During the past year the work of the society has branched out widely in all parts of the state. Lectures, exhibits, radio broadcasts and distribution of literature have characterized the campaign and its possibilities are limited only by funds and personnel available to carry on the work.

Great public interest is continually manifested in the possibilities of control of cancer and in the work of the organization and it is interesting to note that the simple questionnaire sent to members through the monthly News Letter of the association showed that a vast majority not only approve the cancer education program but profess to find more cancer patients coming to them early for diagnosis and treatment as a presumable result of the educational effort.

Cancer of the breast was chosen this year as subject-of-the-month for April to coincide with the annual membership drive of the Minnesota Society for the Control of Cancer. A packet of scientific material was prepared under auspices of this committee for distribution to physicians on request.

Headquarters of the society remain in the Lowry Medical Arts Building where offices were secured without rental through this committee. The chairman serves on the executive committee of the society and all educational undertakings are submitted to the committee for approval.

The Council has repeatedly approved the program and coöperation of all members in the work is urged.

M. W. ALBERT:, M.D., *Chairman*

## COMMITTEE ON FIRST AID AND RED CROSS

The Committee had its first meeting of the year on February 28 at the Lowry Hotel in St. Paul. The decisions of the Committee are as follows:

"The members of the First Aid and Red Cross Committee were unanimous in the belief that, because of the urgency of the present situation, they would follow the standard Red Cross First Aid Textbook in teaching First Aid.

"It was agreed also that, in order to avoid confusing the students, the book would be followed just as it is, without expression of the instructor's personal disagreement with the text.

"The instructor, it is believed, should avoid offense to any social or professional group.

"It was suggested that the physician be the executive officer, that he lay the plans and direct the course, that he personally give the primary instruction but that he utilize available persons in conducting the necessary drills.

"The medical profession is asked to make first aid training available to the hundreds who will be required to take it and to the thousands who will desire it. Air raid wardens, school bus drivers and victory aides are examples of persons who already are required to take it.

"The physician is best qualified of all persons in the community to direct the energies of the host of people who are insistent on giving their help. He need not fear that the entire burden will fall on his own shoulders.

"As a corollary of this, the physician may be sure that many organizations, the membership of some of which is composed of women, are eager to support his efforts. As an introduction to utilization of these groups, the physician should urge participation of the Woman's Auxiliary to the Minnesota State Medical Association.

"Obviously, in the development of the entire program, the prompt support of officers of county and regional medical societies is essential."

The Committee finds upon investigation that the members of the Minnesota State Medical Association are quite adequately supporting the efforts of the American Red Cross and the Office of Civilian Defense in the conduct of first aid classes. However, the Committee stands ready, at any time, and has offered their services to the various organizations that may need instructors in first aid.

On March 20 I went up to the Curtis Hotel in Minneapolis where I, as Chairman of the Committee, addressed the Board of the Woman's Auxiliary of the State Society and they in turn indicated their willingness to coöperate with the Committee.

As Chairman of the Committee, on April 14 I addressed the Blue Earth County Medical Society.

The Chairman of the Committee has broadcast ten times over station KROC in Rochester from the first aid classes which were conducted at North Hall in the Mayo Civic Auditorium. Considerable interest was aroused in the community. It is quite possible that such broadcasts could be carried out in other communities to advantage. However, they probably should be limited as there tends to be enough repetition so that they might become uninteresting if overdone.

The Committee, at the suggestion of Mr. R. R. Rosell, has applied for space at the Duluth meeting for an exhibit on First Aid and Red Cross and have received word that the Duluth Chapter of the American Red Cross will coöperate in this exhibit. It is intended that motion pictures will be shown bearing on the teaching of first aid and that as many members of the Committee as possible will attend the state meeting and take their turns at being present in the booth or room assigned to first aid. Dr. C. H. Mead, of Duluth, a member of the Committee, has been asked to make local arrangements in connection with the local Red Cross chapter.

An official meeting of the Committee will be held in Duluth on June 30 at which time plans for the Committee for the balance of the year will be formulated.

JOHN S. LUNDY, M.D., *Chairman*

## COMMITTEE ON THE CONSERVATION OF HEARING

Interest in the all-out effort today transcends all other interests. Nevertheless your committee is able to report that in Minnesota there has been definite progress in the movement to conserve hearing as a part of the national health program. There is a better understanding of the problem. The larger possibilities of attainment in its solution are being more fully recognized by members of the medical profession, educators and social service workers. Increased hearing hazards incident to war and to the production of war materials in the heavy industries have stimulated unprecedented interest in prevention of avoidable hearing handicaps.

During the past year the number of audiometric tests among school children, college students and entrants in hospital training schools has materially increased.

A greater number of audiometers have been purchased, especially in larger communities, and more hearing-defective children have been discovered and given the benefit of corrective medical care and educational adjustment than in past years.

Lately there has been a noticeable improvement in the technique used in making hearing tests because of a wider use of the pure-tone or pitch range audiometers "accepted" by the Council of Physical Therapy of the American Medical Association for making screening tests for case-finding purposes. Individual tests by their employment yield more accurate results than tests made by instruments in which the fading voice reproduced by the phonograph, for simultaneously checking groups containing as many as forty persons.

Growing interest in the periodic testing of the hearing as a public health measure is shown by the fact that special courses on the conservation of hearing have lately been given jointly by the Department of Public Health and Preventive Medicine and the Division of Ootolaryngology of the University of Minnesota.

It is hoped that similar courses will be offered by the teachers colleges as is done in several other states to meet a growing demand for trained audiometer technicians.

There is urgent need in Minnesota of an effective, competently supervised program for the conservation of hearing to be set up and administered by the State Board of Health and the State Department of Education working in closest coöperation.

The functions of each group should be clearly defined. Such a plan to be effective calls for wise legislation to provide the

necessary tax raised funds which it is hoped will be supplemented by generous grants by federal agencies as a profitable, long-term investment. Such a program will insure to the school child in impoverished rural areas as well as to the pupil in urban centers the benefits of modern preventive and corrective methods for safeguarding the hearing.

It is important that both the medical profession and our law makers recognize the fact that hearing-defective individuals should be placed on an equally favorable basis as those who are physically handicapped in other respects like those having visual, heart, locomotor and other bodily defects.

HORACE NEWHART, M.D., *Chairman*

## COMMITTEE ON VACCINATION AND IMMUNIZATION

A special wartime effort to promote state-wide vaccination and immunization was undertaken under auspices of the committee, this year, in coöperation with the State Board of Health.

The program began in November, 1941, with radio and newspaper publicity in all parts of the state and an appeal by mail to all Parent Teacher associations, American Legion Auxiliary groups, public health nurses, school superintendents and others interested in public health.

Prompted in part by Minnesota's bad record for smallpox in 1940 and in part by the importance of protection against all epidemics as part of the national defense effort, the committee and the state health officials utilized every available means to reach the public with the imperative need for these accepted measures.

Two posters, one of them urging vaccination and the other immunization, were prepared especially for the campaign and were distributed widely over the state, together with small leaflets suitable for distribution at meetings and for mailing with statements. A total of 17,000 of these posters and 308,000 leaflets have been sent out by the state office in the course of the last six months.

As a result of all these efforts all counties in the state have reported some type of community immunization and vaccination program during the year and the amount of vaccine and toxoid distributed through the state department of health has exceeded all previous years. It is the hope of the committee that, with a steady continuing effort on the part of organized medicine, Minnesota may not only erase its former bad record, but virtually eradicate small pox and diphtheria from the state.

It is interesting to note that the annual May day child health program instituted by the Children's Bureau in Washington was devoted exclusively this year to vaccination and immunization and the proclamations on the subject from both the President and Governor Stassen no doubt gave an added impetus to the program of education already well established in this state. Copies of the proclamations were sent by the Board as part of the general educational program to all newspapers in the state.

The measure of progress in public health in any state is quite likely to be the extent and effectiveness of its program for control of smallpox and diphtheria. The energy and public spirit of the physicians are measured by the same yard stick. This committee, with the aid of the State Department of Health, is utilizing every means to reach both the public and the physicians to the end that the public health may be protected and that no reproach can be leveled upon medical leadership in Minnesota.

L. R. CRITCHFIELD, M.D., *Chairman*

## COMMITTEE ON TUBERCULOSIS

*Dates.* The Committee on Tuberculosis held the following meetings during the year: August 21, September 25, and October 25, in the St. Paul Hotel. On November 27, the meeting was held in Litchfield, Minnesota, and on December 11 in Tyler, Minnesota. On January 29, 1942, the meeting was held in the St. Paul Hotel and on March 5 and April 23 the Committee met in the Lowry Hotel in St. Paul. Thus, there were eight regular meetings during the year.

*Request of Council.* At the August 21, 1941, meeting the Committee on Tuberculosis had a communication of June 17, 1941, from the Council of the Minnesota State Medical Association to the effect that the Committee make a careful study of the tuberculosis problem in Minnesota and formulate an adequate program for the control of this disease. The members of the Committee were cognizant of the great responsibility the Council had invested in them. They took the matter seriously and have since devoted a large amount of time to this work.

The tuberculosis problem has many phases which require study, such as incorrigible patients, control of the disease in personnel of school systems, detection of the disease among draftees, preparation of a pamphlet on procedures in diagnosis, treatment and prevention of tuberculosis for physicians, organization of a group of successfully treated patients, study of sanatorium facilities and standards, procedure for controlling tuberculosis in state institutions and an "all out" campaign against tuberculosis.

*Incorrigible Tuberculosis Carriers.*—At the August meeting of the Committee the question of making provision for the incorrigible contagious case of tuberculosis was discussed. It was the consensus of opinion that tuberculosis cannot be controlled in the state of Minnesota as long as persons with contagious disease, who are not coöperative, are allowed to remain in their homes and mingle with others.

At the November meeting, Dr. Hilleboe pointed out that the State Sanatorium would be the logical place for incorrigibles and that Dr. H. A. Burns would be willing to undertake the care of this group of patients, provided special arrangements could be made for financing the necessary facilities and personnel. These persons must be kept under guard, preferably away from other patients; in fact, they must be treated almost the same as prisoners and, therefore, special provision should be made for them. Dr. Hilleboe was of the opinion that the State Department of Health is the logical unit to procure from the legislature funds for this purpose because under the present budget such arrangements cannot be made without depriving coöperative patients of the nursing and medical care they need.

*Personnel of Schools.*—The control of tuberculosis among the personnel of school systems has been highly developed in Minnesota by such persons as Drs. Lewis S. and Kathleen Jordan and Dr. S. A. Slater. The result is most gratifying, inasmuch as many school boards in this state now require adequate examinations of all persons seeking employment, including not only teachers but also bus drivers, janitors, engineers, et cetera.

This is a subject which the Tuberculosis Committee proposes to support in every possible way until all school systems of Minnesota are made safe for employees and students from the standpoint of contagious tuberculosis.

*Examination of Draftees.*—Because of the seriousness of the tuberculosis problem which developed among our service men during and after the first World War, which resulted in a cost of more than a billion dollars to the nation, the Committee manifested much concern over the present inadequate examinations of draftees. Tuberculin tests were not being administered routinely and x-ray films of the chest were not a part of the regular examination. It was the desire of Dr. Chesley that provision be made for adequate examinations for pulmonary tuberculosis of all draftees; therefore, the Committee passed a resolution to the effect that complete chest examinations, including the tuberculin test and x-ray films of the chest of every draftee who reacts, be given to all Minnesota draftees before they are inducted and also before they are discharged from military service.

*Pamphlet on Tuberculosis for Minnesota Physicians.*—At the October, 1941, meeting it was pointed out that the Committee had spent a great deal of time at its previous meetings on the discussion of standard and practical methods of diagnosis, treatment, and prevention of tuberculosis. It had selected the procedures most applicable to Minnesota upon which the Committee members had agreed. It was suggested that this material might be included in a pamphlet to be published in MINNESOTA MEDICINE and reprinted so that it would be available to all physicians of the state, as well as those of other states who requested it. The Committee voted unanimously in favor of this project. An outline was prepared and sent to each member of the Committee, and he was to complete it in the manner considered most suitable. These outlines were assembled and all suggestions and additions were incorporated. The manuscript was submitted again to the members of the Committee for any further suggestions, following which a final manuscript was prepared. It was then approved at a regular meeting of the Committee, after which it was sent to the Council. This body approved the manuscript and transmitted it to the Editing and Publishing Committee of MINNESOTA MEDICINE for publication However, the latter committee rejected it with a statement that it was not suitable for publication in MINNESOTA MEDICINE. This communication was brought before the Tuberculosis Committee and referred to the Council. It was suggested by the Council that possibly the manuscript was too long and that most of the historical consideration should be deleted. This was done and the manuscript was again sent to the Council for any desired disposition. (This manuscript appeared in the October issue of MINNESOTA MEDICINE. Editor's Note.)

*Former Patient Organization.*—At the October, 1941, meeting it was suggested that an organization of tuberculous patients who have been successfully treated, and who wield considerable influence in their communities, might be of great value in promoting the tuberculosis control program throughout the state. It was pointed out that former patients are excellent educators and that they can often do more to promote a tuberculosis control program than professional workers. A number of prominent former patients have been interviewed and, without exception, they have expressed a strong desire to participate in every possible way in the tuberculosis control program. However, to date, no attempt has been made to effect the organization.

*Study of Sanatoriums.*—Minnesota has long been known to have one of the best sanatorium systems in the United States. Since the sanatorium is so important in the control of tuberculosis, it was thought wise to prepare a questionnaire to be sent to the Superintendents of these institutions. We desired to know when each sanatorium was opened, the capacity at that time, and the total cost of the plant. Since epidemiology of tuberculosis was instituted in connection with our tax-supported sanatoriums in 1931, we inquired as to whether if adequate epidemiological work were done in each of the sanatorium districts enough unsuspected cases of tuberculosis would be discovered to fill each institution to capacity. We also inquired as to whether epidemiological workers are provided for

each institution and if not, what the Superintendent would consider adequate in this respect. We were also desirous of knowing whether each sanatorium is adequately staffed. The questionnaires have been returned and the data will be analyzed by the Committee.

It was proposed at the October meeting that the Tuberculosis Committee make an annual inspection of each sanatorium with reference to standards of diagnosis, treatment, epidemiology, et cetera, as practiced in these institutions. It was further proposed that the Committee should recommend to the Council that the State Medical Association issue an annual certificate of approval to each institution meeting the minimum standard requirements. The function of the Committee would be concerned exclusively with professional operation of the institution and would not involve business administration or official relations in any way. The question arose as to whether the sanatorium superintendents would welcome inspections of their institutions by the Committee. Therefore, a questionnaire was mailed to each superintendent and the replies were unanimous in granting this permission; in fact, most of the superintendents stated that they would welcome such inspection at any time.

*Control of Tuberculosis in Institutions for the Mentally Ill.*—Although in 1898 Dr. H. M. Bracken wrote a classical article on tuberculosis in the institutions for the insane, no serious attempt was made to solve the problem until 1934, when Dr. H. A. Burns made an arrangement to administer the tuberculin test not only to the inmates but also to the personnel of our state institutions. Tuberculin reactors had x-ray film inspections of their chests. The finding of relatively large numbers of persons with tuberculosis in these institutions was a revelation. In the meantime, Dr. H. E. Hilleboe became deeply interested in this subject and conducted some excellent tuberculosis work in our state institutions.

On October 28, 1941, our Committee received the following communication from the Council: "The Committee on State Health Relations at a recent meeting recommended to the Council that the Committee on Tuberculosis look into the matter of isolation of tuberculosis cases in state institutions. It was moved, seconded and carried that this matter be referred to the Committee on Tuberculosis."

Because of the fine work which Drs. Burns and Hilleboe had already done in this field, the Committee invited Dr. Hilleboe to address its November meeting. He stated that in the seven hospitals under consideration, there is a patient population of 11,000 with 3,000 employees. He pointed out that the danger of tuberculosis in these institutions is great to the public at large because there are at any given time some 1,500 patients away from the institutions on visits and the employees usually do not live in the institutions. Therefore, there is a great deal of mingling of patients and employees with other persons throughout the state.

Dr. Hilleboe called attention to the fact that because of the contact of employees with tuberculosis patients in the institutions, a great deal of tuberculosis develops among the employees. Moreover, many patients who enter free from clinical tuberculosis develop the disease while in the institutions, which may be due in part to contact with patients who already have the disease in a contagious stage. Because the incidence of infection among the inmates was found to be approximately 85 per cent, the tuberculin test seemed unnecessary, as it might be assumed that practically all persons needed other phases of the examination. Since the 14 by 17 inch celluloid x-ray films are so expensive, it was decided to use the 35 millimeter film in this survey. However, in the Anoka institution both 14 by 17 inch celluloid and 35 millimeter films were used to test the efficiency of the 35 millimeter film. Eleven and one-half per cent of the minimal lesions detected by the large film was missed by the microfilm but the findings were essentially the same for the two films with reference to more extensive lesions. In this survey the employees also had x-ray film inspection of the chest.

Among the 14,500 inmates and employes, 1,100 were found to have the reinfection type of tuberculosis. Dr. Hilleboe's recommendations are as follows:

(1) The tuberculin test should be administered to all new inmates if the infection incidence among them is not too high.
(2) All found to have reinfection type of tuberculosis should be segregated.
(3) Careful follow-up examinations should be made on all with quiescent tuberculosis.

In order to carry out these recommendations, Dr. Hilleboe made the following suggestions:

1. That one center be established for isolation and treatment.

All active and inactive cases should be in one institution and the one at Anoka has been proposed for that purpose. There are 1,440 beds there in ten separate buildings, housing from 100 to 400 patients each. Anoka is near to the cities and consultants are therefore easily available. Non-tuberculous patients from Anoka would be sent to other institutions and the tuberculous population could be classified and housed according to the activity of their disease in the various buildings. If this plan were followed it might be possible to get one or two full-time physicians in tuberculosis to work in the institution in addition to the psychiatric staff.

2. That some kind of x-ray equipment be provided to go through all inmates of other institutions for one year to pick up all remaining persons who may break down in that period. If the rate of breakdowns decreases then, it may be possible to skip a year in the procedure. Only thus can the reservoir of infection in the institutions for mental patients be wiped out. If more counties are to be accredited for tuberculosis control this reservoir must be removed and it is far easier to catch and treat these infected persons in the institutions than in the general population of the state.

The Governor appears sympathetic to the program and it seems likely that something may be done if we are ready to present the problem on July 1, Dr. Hilleboe believes.

It should be remembered that the employes in these institutions live in the communities, not in the hospitals. Also, about 25 per cent of inmates, according to Doctor Freeman, are discharged permanently over a period of ten years. The problem of visitors to patients is likewise serious and should be considered.

Dr. Hilleboe estimated that a minimum of about $50,000 would be needed to continue the program of controlling tuberculosis in the institutions for the mentally ill in Minnesota. On request of the Committee, Dr. Hilleboe agreed to provide a complete report of the survey for the use of the Committee.

*Resolution Regarding Dr. Chesley.*—Because of the fine interest the Minnesota State Department of Health has taken in tuberculosis since its organization in 1872, and especially because of the work that has been done in more recent years, under the direction of Dr. A. J. Chesley, the Committee adopted a resolution at its September meeting to the effect that this committee extends warm appreciation to Dr. Chesley for his services to tuberculosis control in Minnesota and particularly for his aid and coöperation in the work of this committee.

Extensive scientific and epidemiological material was arranged for exhibit at the State Association meeting at Duluth. All phases of committee activity were represented.

*Accreditation of Counties.*—At the September, 1941, meeting of the Committee, it was suggested that standards be determined by which counties in the state of Minnesota might qualify for special recognition or accreditation. The members of the Committee were unanimous in their opinion that the time was ready for such a procedure. Dr. A. J. Chesley and Dr. Orianna McDaniel of the Minnesota Department of Health promptly provided the Committee with the average mortality rate from tuberculosis over the past five years for each of the eighty-seven counties. Committee members agreed that one standard for accreditation should be an average mortality rate over the past five years of ten or less per 100,000. By this standard four counties already qualified: Lincoln, 5.5; Olmsted, 8.7; Murray, 9.4; and Stevens, 9.2.

The Committee decided that there should also be a second standard, which would consist of testing at least 80 per cent of all the seniors in the high schools of a county and finding not more than 15 per cent reactors. The physicians of Lincoln County were informed that the lowest mortality rate in the state obtained there and that if the county could qualify for the second standard, it would be the first to be accredited. Within two weeks of this announcement, the practicing physicians of Lincoln County had tested the seniors in the high schools and reported an incidence of only 7.4 per cent reactors. Therefore, accreditation appeared to be a reality in that county.

It was agreed that the work of the Tuberculosis Committee would consist of encouraging and aiding the physicians in the various counties in achieving the standards of Accreditation; that the Committee would accept the figures reported by the physicians of the counties and would transmit them with the Committee's recommendations to the Council. If approved by the Council, this body would submit them to the State Department of Health and if approved, the county would be accredited.

This proposal was presented to the Council and on October 28, 1941, the Committee received the following communication: "The matter of issuing a certificate or some means of recognition to the four counties in Minnesota eligible for accreditation was discussed. It was moved, seconded and carried that the State Department of Health and the State Medical Association, subject to the approval of the Department of Health, issue a certificate of accreditation and the Committee on Tuberculosis and the Department of Health prepare the certificate." It was then presented to the State Department of Health at its October meeting, where it met with unanimous approval.

Members of the Committee, together with Drs. Ruth E. Boynton and A. G. Schulze, proceeded to draw up a certificate form, which was later approved by the Council and the State Department of Health. This certificate was to be signed by the Governor of the state, the Executive Secretary of the State Department of Health and the President of the State Medical Association.

*Accreditation of Lincoln County.*—Since Lincoln County had qualified for accreditation, arrangements were made for a celebration at Tyler, Minnesota, on December 11, 1941. This was an historical event in the tuberculosis control movement in the state of Minnesota and the entire nation. Large numbers of persons from various walks of life attended the ceremonies and the certificate signed by Governor Harold E. Stassen, Dr. A. J. Chesley, Executive Secretary of the Minnesota Department of Health, and Dr. B. J. Branton, President of the State Medical Association, was presented.

*Accreditation of Olmsted County.*—In the meantime the physicians of Olmsted County proceeded to test the seniors in the high schools and the percentage found together with a mortality rate of 8.7 per cent for the past five years qualified this county for accreditation. On May 22, 1942, the accreditation ceremonies were held in the Central School Auditorium at Rochester, Minnesota. Dr. C. A. Stewart, Director of the Department of Pediatrics of Louisiana State University in New Orleans was the principal speaker. He presented in a splendid manner the history of tuberculosis control in Minnesota. Many prominent persons attended the ceremonies and the certificate was presented to Olmsted County by Dr. H. Z. Giffin, President of the Minnesota State Medical Association, whose signature it bore, as well as that of Governor Stassen and Dr. A. J. Chesley.

*Plans for Accreditation of Murray and Stevens Counties.*—Upon learning that Murray County might qualify for accreditation, the practicing physicians hastened to the high school where 96 per cent of the seniors were tested with tuberculin and only 5.5 per cent reacted. Those in charge of the work in this county have decided that they would like to have the accreditation ceremonies conducted at the time of their County Fair, when large numbers of citizens will be assembled.

Stevens County has also qualified from the standpoint of mortality rate and the senior high school students are being tested. On the basis of previous testing in this county there seems little doubt but that the incidence of reactors will be well within the qualification limits.

Thus, for the first time in America, the county has been employed as the unit in tuberculosis control, with the local practicing physicians and their allies conducting the work and with special recognition being given by official organizations.

*The Meeker County Project.*—The Meeker County project has continued and from time to time the physicians of this county have reported definite progress. The program outlined consisted of the administration of the tuberculin test to persons of all ages among the total population of approximately 20,000. All tuberculin reactors found on first or subsequent testing were to have x-ray film inspections of their chests (except children from birth to twelve years.) All persons found to have pulmonary lesions, as manifested by shadows on the x-ray films, were to be completely examined, to determine the etiology of their disease, and those who were proved to have clinical tuberculosis in the contagious stage were to be isolated at once, while those with such disease in the pre-contagious stage would be treated by either their local physicians or hospitalized, as recommended by their physicians. When this program was adopted, arrangements were made whereby the State Department of Health would provide tuberculin in the proper dilution without expense to the physicians of Meeker County; the tuberculin was to be delivered on the request of the individual physician.

The question of x-ray film was discussed at a number of meetings and producers of films were contacted with reference to any possible provision for supplying films at reduced cost for such a demonstration. None of the makers of celluloid films found his way clear to provide film at a cost less than the usual market price. The paper film, which has been found to be equal to the celluloid film in the detection of disease in the lungs, was then considered. This film has been used extensively by such persons as Dr. H. R. Edwards, Director of the Bureau of Tuberculosis, Department of Health of the City of New York, the Advisory Committee on Tuberculosis of the Medical Society of New Jersey, aided by Dr. Abraham E. Jaffin, and Dr. H. D. Lees of the University of Pennsylvania. It has also been used widely by several members of our own Committee, who have found it equal to the celluloid film.

One of the companies producing paper x-ray film, the Powers X-ray Products, Inc., was contacted and it was found that this film could be procured at an extremely low cost. The physicians of Meeker County were willing to give the paper film a trial, if the State Medical Association would procure it for them. At the April, 1942, meeting of the Tuberculosis Committee Dr. Karl Danielson of Litchfield stated that the paper film had been found entirely satisfactory by the doctors of Meeker County and there had been no difficulty whatsoever in developing a satisfactory technique of processing this film. Therefore, the expense of making x-ray film inspection of the chest has been extremely small.

*Accomplishments.*—On May 1, 1942, the Meeker County physicians reported that 5,412 persons had been tested with tuberculin; 21.8 per cent reacted. From this group 10 were found to have clinical pulmonary tuberculosis, for whom adequate treatment has been provided. There is no place in the United States, and probably none in the world, where a group of practicing physicians have manifested a finer spirit in controlling tuberculosis than that of the Meeker County group. They have conducted the examinations with no remuneration and have at all times been enthusiastic about the work.

*Procurement of Funds.*—The only serious difficulty has been the procurement of funds to provide for the necessary expenses. The State Medical Association has contributed approximately $1,000.00 to this cause. The Northwestern National Life Insurance Company and the Minnesota Mutual Life Insurance Company manifested considerable interest in the project but found it impossible to offer more than moral support.

The Meeker County Commissioners have been contacted by the local physicians but they have not seen their way clear to offer any financial assistance. On April 20, 1942, the Executive Committee of the Minnesota Public Health Association took favorable action toward providing some financial assistance. This was accomplished through the efforts of Drs. Meyerding and Slater. On May 8, 1942, Dr. S. A. Slater presented the Meeker County program to the Board of Directors of the National Tuberculosis Association at its regular meeting in the Bellevue-Stratford Hotel in Philadelphia. He requested $1,000.00 which was granted by this organization. While the sum available from the Christmas Seal organizations is extremely helpful, it is not adequate to carry the project to completion.

Although film has been provided for the physicians in Meeker County, we do not feel that they should be required to use their x-ray equipment and process the films at their own expense. To us it seems more than sufficient that they are giving at least $100,000.00 worth of service to the citizens of their county. Therefore, more funds are necessary to provide only for expenses. As the project continues there will be definite need for one or two paid workers to go from house to house and even administer tuberculin tests in the homes, the fields, and elsewhere, and actually bring to the physicians' offices the reactors for x-ray film inspections of their chests. Although practically no opposition has been manifested to the tuberculin test or any other phase of the examination, there are always such factors as procrastination which make necessary actual contact by a paid worker. The members of our Committee are hopeful that some public-spirited Minnesota citizen, who has adequate funds, will come to the rescue. Such a person could easily be immortalized and his name would go down in history as one of the great benefactors of mankind for making possible an "all-out," county-wide tuberculosis program. We do not believe there is any doubt but that this is the only way to solve the tuberculosis problem and that the Meeker County demonstration will be adopted not only by the other counties of Minnesota but also the counties of the entire nation. No member of the Tuberculosis Committee or of the Meeker County group of physicians is to profit in any way or, indeed, receive any remuneration whatsoever from any funds contributed by organizations or individuals; all of us are giving our time willingly and enthusiastically, with the thought of defeating the greatest disease enemy of mankind since the beginning of history.

*National Publicity.*—Encouragement was provided for all persons participating in the Meeker County tuberculosis control project when on May 2, 1942, page 18, **Colliers'** magazine published an article by Robert Thompson entitled, "Worth More Than a Cow," in which the author describes the Meeker County program. This has brought the Meeker County project to the attention of the nation, as well as other countries. The physicians of the Minnesota State Medical Association cannot find words to express their great appreciation to Robert Thompson and to the editorial staff of **Colliers'** magazine, of which Mr. William L. Chenery is Editor, Charles Colebaugh is Managing Editor, and Thomas H. Beck is Editorial Director, for this wonderful service to humanity.

*Interest of Governor Stassen.*—The members of the Committee are delighted with the fine interest Governor Harold E. Stassen has manifested in tuberculosis. At one of the meetings, it was thought desirable to assemble our various proposals and ask the Governor to meet with us so that we might benefit from his suggestions and recommendations. On March 31, 1942 an invitation was extended to him and on April 2, 1942 he wrote: "I shall be glad to meet with the Committee as you suggested." The Committee, therefore, is preparing all of its present recommendations and desires to have this meeting with the Governor some time during the summer.

J. A. MYERS, M.D., *Chairman*

## COMMITTEE ON PSYCHOPATHIC PERSONALITIES

The Committee on Psychopathic Personalities was not active during the past year but it was felt the Committee should be kept intact in order to deal with questions which might be raised by the State Bar Association's Committee on Psychopathic Personality.

Your chairman has been asked to write an article for the **Law Review** on the subjective and he intends to do so in cooperation with Mr. Kent Van den Berg of the Attorney General's Office.

GORDON R. KAMMAN, M.D., *Chairman*

## COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

Since the county medical society meetings are the most practical centers for the dissemination of medical knowledge, this committee is attempting to learn more about these groups throughout Minnesota. A circular on various aspects of these meetings has been returned and is now in the process of being reviewed.

ARTHUR H. WELLS, M.D., *Chairman*

## HEART COMMITTEE

All members of the committee, except two (local) were circularized asking for ideas and comments on a program for the year. No replies were received. I am sure that owing to the war, all of the members are under more stress than usual, for which reason the committee's function, in spite of the staggering of membership, is still a negative quantity.

HENRY L. ULRICH, M.D., *Chairman*

### COMMITTEE TO STUDY MOTOR VEHICLE ACCIDENTS

After considerable study in the year 1940 and 1941, this Committee reported to the Council and House of Delegates last year that there was controversy in this subject, advised that we take a conservative attitude and sort of watch it from the sidelines. Time has indicated this to have been a wise procedure.

During the past year, there has been nothing, regarding this subject, brought to the attention of the Committee; there have been no meetings and we have no further report to make.

We feel that the purpose for which this Committee was formed has been fulfilled and we, therefore, respectfully suggest that it be disbanded.

J. C. HULTKRANS, M.D., *Chairman*

DR. LYNCH, Chairman of Reference Committee: Without comment we move acceptance of the Report of the Committee on Psychopathic Personalities.

Without comment we move acceptance of the Report of the Committee on Medical Education and Hospitals.

Without comment we move acceptance of the Report of the Heart Committee.

Without comment we move acceptance of the Report of the Committee to Study Motor Vehicle Accidents.

We move acceptance of the Report of the Committee on Cancer and wish to compliment them on their efforts and the coöperation obtained by them from the Minnesota Society for the Control of Cancer and the Women's Field Army for the Control of Cancer.

We move acceptance of the Report of the Committee on First Aid and Red Cross and congratulate them on the success of their efforts in aiding the program of first-aid teaching. Numerous members of the State Medical Association have been very generous with their time and very coöperative in following the standards of the Red Cross text book rather than confusing the public by teaching their own methods.

We move acceptance of the Report of the Committee on the Conservation of Hearing. We approve of their general program with emphasis on the necessity for further instruction of the medical profession. It is hoped that this committee can obtain even more effective coöperation with the State Department of Health and the State Department of Education.

We move acceptance of the Report of the Committee on Vaccination and Immunization. We congratulate them on the success of their efforts and hope that they will gain an even greater degree of success next year.

We move acceptance of the Report of the Committee on Tuberculosis and call the attention of the individual delegates to the complete report of the committee and urge that it be read by every delegate. We further call the attention of the Council to the request of the Committee on Tuberculosis for consideration of the issuance of annual certificates of approval to tuberculosis institutions meeting the minimum standard of requirements after inspection. We congratulate the committee on their institution of the program of accreditation of counties whose average mortality rate and estimated infection rate meet with certain standards set up by the committee. The members of the House of Delegates are probably completely familiar with the Meeker County Project which has attracted considerable local and national publicity for the problem of tuberculous infection. We hope that the outcome of this study will be very helpful in determining the nature of our efforts along this line in the future.

Five minutes being allotted to each committee chairman who desired to discuss the report of his committee, the Speaker called on the chairman of the committees as follows:

DR. HORACE NEWHART, Minneapolis, Chairman of Committee on Conservation of Hearing: Opportunities for real accomplishment in the neglected field of conservation of hearing have never been greater. The program in our own state is not what we would like to have it but the work of testing hearing of school children is today underway in forty communities, 35,000 children having been tested in one city during the past year. Because progress has been rapid in the last few years an educational program is needed among our own members to familiarize them with new developments in prevention of unnecessary hearing handicaps. More attention should be given to the subject in county and state society meetings so that we may in turn help to educate the people in the possibility of protecting many future citizens from the misfortune of deafness. When this is done we may hope to introduce with success carefully planned legislation to permit establishment of a program such as has been established in other states, to take care of the school child and ultimately to reach out into other fields, especially in industry, so as to prevent hearing defects. The State Departments of Health and Education are the channels through which this must be accomplished. So far it has been impossible to put such a program into motion because of lack of funds. If medical men back such a movement, however, appropriations and proper legislation can be obtained. If not it is quite possible that the responsibility will be assumed by non-medical groups. We need to be more energetic in this field of preventive medicine.

DR. A. H. WELLS, Duluth, chairman of Committee on Hospitals and Medical Legislation: My object in speaking to you now is to ask you for suggestions for our work. To that end, we have sent out a list of questions to secretaries and we are compiling lists of activities of medical societies. What it is going to yield I do not know. We must not let down on our program of post-graduate education, but we should have definite information about what you want in mapping our program.

DR. J. A. MYERS, Minneapolis, chairman of Committee on Tuberculosis: The medical profession of Minnesota holds in its palm the solution of the tuberculosis problem. The accomplishments of the profession in Minnesota have always been outstanding. In 1911, 2,500 people died of tuberculosis in Minnesota, a mortality rate of 110. In 1941, approximately 700 died from tuberculosis with a rate of 27 per 100,000 population. Furthermore, we now have the facilities and the knowledge necessary to control this disease. We have the technique, the sanatorium beds, an unusually well-informed public and an active State Board of Health. All that remains is to go forward and put them to use. We have made a start, as you know, in Meeker county and in the accreditation program. I would like to say a word about the doctors of Meeker county in this connection. I do not think anyone in our tuberculosis work has ever shown a finer spirit than has been manifested by this group. Their enthusiasm has not waned. They will complete the program in Meeker county and the Committee is only hoping that other counties will take up similar demonstrations when this one is completed. The accreditation program is also progressing. Two counties. Lincoln and Olmsted, have already been accredited. Murray county is ready and, there, due to Dr. Slater's fine work, out of 97 per cent of the seniors who submitted to the test only 5.1 per cent reacted. We are looking forward to a time when every county in the state will be accredited. The committee is doing its best to bring the very latest knowledge about tuberculosis to all our groups of medical men and at the same time it asks for suggestions from all doctors who are willing to aid in this program. The time is not far away, we feel, when tuberculosis will be reduced to the same low level as typhoid and diphtheria in this state.

Dr. A. E. Cardle, Minneapolis, asked Dr. Newhart from the floor what has been done in the way of ameliorating ear defects following tests of hearing.

DR. NEWHART: That is a very proper question. A great deal has been done in the way of medical follow-

up to remove causes and treat the individual patient thus discovered. The importance of testing among school children lies in the fact that this early discovery makes effective treatment possible. There is another type of follow-up, too, which lies in educational adjustments, training in lip-reading, et cetera. It is also going forward as extensively as facilities permit.

At the request of the Speaker it was then moved, seconded and carried that the report of the Reference Committee on Medical Education reports be accepted.

The Speaker then called for the report of the Reference Committee on Miscellaneous Scientific reports of which Dr. A. N. Collins of Duluth was chairman.

The following reports were considered:

### COMMITTEE ON CHILD HEALTH

On February 28, 1942, a meeting of the Committee on Child Health was held. The greater part of the time was occupied by discussion of the Summer Round-Up Program of the Parent-Teachers' Association and the matter of examinations of school children. A recommendation was prepared and transmitted to the Council of the State Medical Association relative to arrangements for an institute to be held at the Center for Continuation Study to which members of the State Association will be invited. Further discussion dealt with the program of the Bureau for Crippled Children which has to do with the study and care of children with heart disease. The Council was asked to accept the resolution pledging the coöperation of the profession of the State in the program.

R. L. J. KENNEDY, M.D., *Chairman*

### COMMITTEE ON MEDICAL TESTIMONY

The Medical Testimony Committee has reviewed two cases during the past year. One case was referred to the Committee by a physician; the other case by a Judge of the Supreme Court. After reviewing the entire proceedings, a member of the Committee was appointed to discuss the testimony of the physicians in question with them. This was done and will undoubtedly have a beneficial effect.

On several occasions members of the Committee have received verbal reports from physicians about certain questionable testimony given in court by medical men of our Society. However, the complaining physicians would not submit a proper complaint in writing. For that reason, your Committee was unable to proceed with the investigation of these cases, two of which your Chairman believes should have been investigated.

The committee has adopted the policy that, in the future, the name of the physician requesting an investigation about questionable testimony given in any court by any physician in the state of Minnesota be kept confidential and known only to the members of the committee. This will avoid any possible embarrassment to the physician requesting the investigation. Furthermore, it should overcome entirely the unwillingness of members of the Minnesota State Medical Association to report in writing these physicians whose testimony requires careful study by the Medical Testimony Committee. Your committee will do their utmost to keep the standards of medical expert testimony at its highest level in the courts of this state provided we have the full coöperation of every member of our association. The committee feels that the members of the State Medical Association have not given their full support in either hesitating or being negligent in advising this committee in writing.

Requests have been received from six state and county Medical Societies to advise them about the details of our Committee.

Two articles have been published in the Journal of American Insurance, and in the Bulletin of the Association of Railway Claim Agents (National Journals) describing the activities of the Medical Testimony Committee of our Society.

E. M. HAMMES, M.D., *Chairman*

### COMMITTEE ON OPHTHALMOLOGY

On September 26, the Committee on Ophthalmology met with Mr. N. H. Debel and Mr. P. J. O'Connor of the Industrial Commission, to discuss the standardization of disabilities due to ocular injuries. The report of the Committee on Visual Economics of the American Medical Association was called to the attention of the members of the Industrial Commission. This report takes into consideration corrected visual acuity, field defects, ocular motility, visual deficiency of one eye and of the coördinate visual efficiency of both eyes, before evaluating disability. Furthermore it suggests that compensation shall not be computed until all reasonable operations and treatment have been attempted to correct the defect, and that at least three, and in some cases up to sixteen, months have elapsed after all visible evidences of inflammation have subsided, before evaluating the disability.

Messrs. Debel and O'Connor were very pleased to enter into the discussion of the problem and anxious to coöperate in any plan which would facilitate obtaining a fair settlement of compensation resulting from ocular injuries. Mr. Debel requested that copies of the report be sent to him for distribution among the Commissioners, Referees and Attorneys, to assist them in their work of evaluating ocular disabilities.

At the request of the Committee on Ophthalmology, the Report of the Visual Economics Committee was reprinted in MINNESOTA MEDICINE.

The Committee on Ophthalmology approved the plan of the Minnesota Society for the Prevention of Blindness, to conduct a diagnostic survey of the eye conditions of school children in one county in the State. This survey was to be conducted by members of the University Hospital Staff, not in private practice, and was to be diagnostic in nature only. The Committee recommended to the State Medical Association that they make a donation to help carry out this survey. The Council responded with a liberal donation.

T. R. FRITSCHE, M.D., *Chairman*

### COMMITTEE ON FRACTURES

The Committee on Fractures of the Minnesota State Medical Association for 1942 has continued to give attention to improvement of the emergency care and transportation of simple and compound fractures of the long bones of the extremeties, as recommended in the report of the 1941 committee published in the November, 1941, issue of MINNESOTA MEDICINE on pages 985 and 986. In the 1941 report it was recommended that a city ordinance be passed, in all cities of Minnesota, requiring minimum splint equipment on ambulances and requiring that ambulance attendants have knowledge of first aid and of the application of transportation splints. In order to obtain the passage of such an ordinance there must be considerable preliminary work performed by members of the committee on fractures or by someone who is interested in improving the care of fractures in his community and who recognizes the value of proper first aid and transportation splints in fracture cases. All members of the medical profession must first be sold on the value and practicability of the splint program so that when they are consulted by the local city council members they will know the answers. The former complaint that there was "a danger of putting the practice of medicine in the hands of laymen," with the splint campaign, is no longer heard. The private ambulance companies can be easily sold by giving them demonstrations of the use and value of the splints for the comfort and safety of the patients they are transporting and by showing the ambulance companies that when their improved service becomes known their number of calls will be increased and there will then be less jack-knifing of fracture patients into automobiles for transportation without proper splinting. It is not difficult to persuade the authorities of charity institutions that the costs to the taxpayers will be lowered when charity patients arrive with fractures that have been properly splinted and where further damage to the soft parts in transportation has been prevented. Money will be saved because of a shortened period of hospitalization and of morbidity after leaving the hospital and the patient will spend less time on relief. There will also be less permanent disability resulting from the fracture and consequently the patient will earn more money sooner if he has had proper first aid and transportation splints for his fracture. Before going before the city council it is well not only to line up the members of the profession, the private ambulance companies and the charity hospitals but it is also well to obtain the official approval of the county medical society and the local surgical society so that one can inform the council members that there is not only no local opposition but also that official action has been taken by representative bodies of the medical profession. After having laid this groundwork the value of the ordinance lies in the fact that it has become a recognized necessity in the community and the penalty clause insures continuity of the program.

The ordinance passed in Minneapolis in the spring of 1942 is presented in this report so that others may be saved some of the time and effort required in preparing such a law. This ordinance is more detailed and specific than the one published in the 1941 report of the Committee on Fractures.

#### AN ORDINANCE

REGULATING PUBLIC AND PRIVATE AMBULANCES, OPERATED IN THE CITY OF MINNEAPOLIS; PROVIDING FOR MINIMUM EQUIPMENT OF SUCH AMBULANCES AND FIRST AID SERVICE THEREIN; PROHIBITING OPERATION WITHOUT A PERMIT FROM THE COMMISSIONER OF HEALTH, AND PROVIDING PENALTIES FOR VIOLATION THEREOF.

The City Council of the City of Minneapolis do ordain as follows:

Section 1. No person, firm or corporation shall operate or cause to be operated in the City of Minneapolis any ambulance, public or private, or any other vehicle commonly used for the transportation or conveyance of the sick or injured, without first securing a permit therefor from the Commissioner of Health as hereinafter provided.

Section 2. Every ambulance or vehicle hereinafter described, before permit is issued therefor, shall be equipped with and, when in service, carry as minimum equipment the following:

(a) Two United States Army hinged ring upper extremity splints, or in lieu thereof, two splints for the upper extremity, approved by the State Department of Health.

(b) Two United States Army hinged half-ring lower extremity splints, or in lieu thereof, two lower extremity splints, approved by the State Department of Health.

Section 3. Every such ambulance or vehicle hereinabove described when in service shall be accompanied by at least one person who has acquired theoretical or practical knowledge in first aid as ambulance attendant and in the application and use of approved splints to arm and leg fractures, evidenced by

a certificate issued to such person by the State Department of Health or by the Commissioner of Health of the City of Minneapolis, under such rules and regulations as either may prescribe.

Section 4. Application for a permit to operate any such ambulance or other vehicle hereinabove described on the streets of Minneapolis shall be made to the Commissioner of Health upon such form as he shall prescribe, which application shall contain evidence satisfactory to the Commissioner of Health that the person seeking the permit has complied with the minimum standards set forth in this ordinance as to first aid equipment and is prepared to and will furnish an ambulance attendant, as required in Section 3 hereof. If the Commissioner of Health finds that the requirements of this ordinance are and will be met by the applicant as to each vehicle proposed to be operated, he shall issue a permit, upon payment of a fee of One Dollar ($1.00) for each vehicle, which permit shall expire upon the first Monday in May next following the issuance thereof. Such permit may be renewed by the Commissioner of Health from year to year, upon such evidence as shall be required by the Commissioner of Health that the holder thereof is complying with the minimum requirements of this ordinance and upon payment of an annual fee of One Dollar ($1.00). No fee shall be required for a permit for an ambulance or vehicle owned and operated by the City of Minneapolis or any of its boards or departments.

Each permit shall be numbered and posted at such place in the interior of the ambulance or vehicle as the Commissioner of Health may require.

Any such permit shall be subject to revocation by the Commissioner of Health for failure to comply with any of the provisions hereof, upon notice and an opportunity to be heard.

Section 5. Any person violating the provisions of this ordinance shall, upon conviction thereof, be punished by a fine of not to exceed One Hundred Dollars ($100.00), or by imprisonment for not more than ninety (90) days.

Section 6. This ordinance shall take effect and be in force from and after the first Monday in May, 1942; provided, that applications for a permit hereunder may be made prior to said day, after the passage and publication hereof, for a permit beginning upon said first Monday in May.

Passed April 24, 1942. W. Glen Wallace, President of the Council.
Approved April 24, 1942. Marvin L. Kline, Mayor

Attest: Chas. C. Swanson, City Clerk.

In the above Ordinance the United States Army splints have been mentioned on the theory that when better splints are made the Army will use them. Furthermore many members of the medical profession and of the laity who are in the Army will be familiar with these splints on their return home and will expect to find them available.

There has been some objection to the hinged ring upper extremity splint because of the danger of over-pulling and of pressure paralysis due to the traction applied. There are very few instruments in surgery which cannot be wrongly used. Every movie film and nearly every paper on the subject has called attention to this danger which also exists, in part, with every case where crutches are worn. It might be mentioned that our attention has been called to cases where the lower extremity splints has been wrongly applied. There is still some objection to the use of traction type splints in cases where one end of the bone in a compound fracture has penetrated the skin and is still protruding. This point was thoroughly discussed in the 1941 report. The uses and values of these splints in compound fractures is now again being demonstrated in the present war where they are being applied by private soldiers. It should also be noted that in the ordinance improved splints or substitute splints have been allowed for subject to their being approved by the Department of Health.

ROSCOE C. WEBB, M.D., *Chairman*

## HISTORICAL COMMITTEE

Your Historical Committee submits the following report: Beginning with January, 1938, and continuing to date, there have been published in MINNESOTA MEDICINE the following articles on the pioneer history of medicine in Minnesota:

Introduction
The background of medical history for northeastern Minnesota and the Lake Superior Region
Organization of the St. Louis County Medical Society
Survey of pioneer members of the St. Louis County Medical Society
Pioneer physicians of the Vermillion and Mesaba Ranges in Minnesota
Medicine in Washington and Chisago Counties
History of medicine in Ramsey County
History of medicine in Hennepin County
History of medicine in Winona County
The missionary as a practitioner
Diseases of the Dakota Indians
Dakota medicine
History of medicine in Dakota County
History of medicine in Brown County
Homeopathic and eclectic medicine in Minnesota
History of the Minnesota State Medical Society (in publication)

*Material listed in May, 1941, by Dr. J. M. Armstrong as available for publication*

Major papers: Edward Purcell, the first physician in Minnesota
Biography of Dr. William Sitgreaves Cox
Nicollet County
Asiatic cholera in St. Paul
Minnesota Valley Medical Society
Mower and Freeborn Counties
Kittson County
Wabasha County
Goodhue County
Medical books of W. W. Mayo
Steele and LeSueur Counties
Scott and Carver Counties
Beginning of the Mayo Clinic
Medical Instruction
Medical Journalism
Early practice of medicine in Minnesota
Medical men and fur traders
The advent of the frontier practitioner
Fairchild: First period of practice of medicine
Walling: Pioneer practice in the Northwest
Hospitalization and public health

As the result of this inquiry the following information has been received:

The narratives for Stearns and Benton Counties are under way. The histories for Martin and Faribault Counties (Blue Earth Valley Medical Society) and for Watonwan County are in preparation. A history for Swift County has been promised.

The history for Dodge County has been completed. Biographical data have been collected for Fillmore and Houston Counties and the accounts are being compiled. Investigative work in Olmsted County is being carried out.

Investigators have been appointed in Cottonwood, Jackson, Murray, Nobles, Pipestone, and Rock Counties (Southwestern Minnesota Medical Society), and in Big Stone, Pope, Stevens and Traverse Counties (West Central Minnesota Medical Society).

It is hoped that the members of the Historical Committee will act as representatives of the Committee in the different regions of the state to stimulate the work and bring it to completion.

*Joint meeting:* At a joint meeting of the Historical Committee and the Council on Friday, November 7, 1941, in Saint Paul, suggestions pertaining to publication of the book were discussed. It was thought at that time that the book might include histories of the State Board of Health, the State Medical Association, the State Board of Medical Examiners, state hospitals, medical schools, special medical societies and medical journals published in Minnesota.

Your Committee wishes to make three recommendations:

1. That the collection of historical data continue and that a working questionnaire for use by the historical investigators be printed by the State Medical Association.
2. That publication of the book be deferred for the duration of the present war emergency unless there is presented some method more practical than that now under consideration.
3. That steps be taken to secure an editor who will correlate the material so as to produce at a future date a concise, coherent history of two or more volumes.

M. C. PIPER, M.D., *Chairman*

## COMMITTEE ON INDUSTRIAL HEALTH

Minnesota is in the upper third of the states so far as the number of workers in industry is concerned and industrial medicine is therefore more important here than many physicians have hitherto believed.

At its meeting in March of this year, the Committee on Industrial Health formally endorsed the entire program of the new Division of Industrial Health of the State Department of Health. Also they took action to publicize it and encourage the profession to coöperate in the survey on occupational disease begun by the division in February.

The program now underway under the leadership of the division is as follows:

1. To receive and investigate reports of all occupational diseases.

The committee took occasion to point out that some physicians might hesitate to send their reports under the impression that in so doing they might be betraying the companies by whom they are employed. It was generally agreed that, whether diseases are compensable under the law or not, it is essential to take whatever action is possible to control occupational diseases, lessen absenteeism and risks to the plant.

2. To promote employment of full-time or part-time physicians and nurses.
3. To provide properly equipped first-aid rooms and maintain sickness records.
4. To encourage use of preëmployment and periodic physical examination, including routine Wassermann tests,—though the tests should not be used as a means of discrimination against employes who secure adequate treatment and do not present a hazard to fellow employes.

Dr. Foker reported to the committee that efforts of his Division are now concentrated on defense industries at the request of the United States Public Health Service; that trained engineering personnel are available to make plant

studies and to recommend methods of control for health hazards thus discovered; that plant executives have coöperated cordially with the division in the work.

At the present time the work of the division is financed largely by federal funds since the $10,000 appropriation asked of the State Legislature did not materialize, though the State Emergency Finance Committee appropriated $1,750 up to July 1 this year to aid in the work.

It was decided to provide whatever expert assistance might be required to the Interim Committee on Industrial Health of the State Legislature which has been investigating the advisability of changing the present law on compensable diseases generally regarded as incomplete and unsatisfactory. Also to acquaint other organizations, such as the Safety Council, nurses committees, dental groups, of the existence of the committee and suggest that a representative attend their meetings so as to keep the committee informed of their work in this field. Likewise to contact University authorities on the advisability of a more definite course of instruction in the medical school on industrial health and medicine.

In accordance with action taken by the House of Delegates last year a page has been set aside in MINNESOTA MEDICINE each month for discussions on Industrial Health. Short articles are now appearing monthly by members of the committee on practical aspects of plant health and control of disease among workers. A complete analysis of the program of the Division of Industrial Health and especially of the survey on occupational diseases has also appeared in these pages.

It is the hope of the committee that this monthly editorial feature may be practical and valuable especially to general practitioners who will be called upon more and more to consult on health problems with local industries and to treat industrial patients.

The aid of all who are interested in this urgently important subject will be welcomed for this section.

J. L. MCLEOD, M.D., *Chairman*

## COMMITTEE ON INTERPROFESSIONAL RELATIONS

The first meeting was held on Friday evening, February 27, preceding the County Officers' Meeting. Representatives of the State Board of Nursing Examiners attended.

The purpose of the meeting was to discuss the nursing situation in Minnesota and to consider the resolution pertaining to this matter introduced at the last meeting of the House of Delegates, and referred to the Committee on Interprofessional Relations. More specifically this refers to certain points at issue between the State Board of Nurses' Examiners and St. John's Hospital at Red Wing, the Naeve, of Albert Lea, St. Lucas of Faribault, and St. Francis of Breckenridge.

Miss Halvorson, of the State Board of Nurses' Examiners had prepared charts, very completely showing all details of hospital administration as pertaining to nurses instruction, number of beds, patients in various departments, the present minimum standards of nursing education acceptable to the State Board of Nurses' Examiners, and the minimum standards to be enforced in September, 1942. Careful analysis shows but a slight discrepancy between these requirements and the present existing course of education for nurses in these hospitals.

It was brought out in the meeting that nurses to be officially recognized by the Red Cross must be graduates of institutions approved by the State Board of Nurses' Examiners and this also applies to nurses eligible to service with our armed forces. This illustrates one of the important points to be ironed out with reference to these hospitals, for if their graduates are not approved by the Board they cannot serve in the Army or Navy.

Many of the smaller hospitals in the state whose graduates are not recognized by the State Board of Nurses' Examiners are training their own nurses, and apparently, successfully. It was fully brought out by Dr. Carl Johnson that there is danger of these young women assuming too much responsibility as nurses, and after the present emergency, of their organization with accompanying demands for legal recognition. The question of affiliation with larger hospitals presents many complications, and this problem will require further consideration.

Two constructive suggestions resulted from this meeting; the first suggestion by Mr. Schacht of Red Wing was that there should be organized a liaison committee consisting of three doctors, three members of the State Nurses' Association, and three members of the State Hospital Association, to consider any questions which might properly come before them with reference to difficulties between the hospitals and the State Board of Nurses' Examiners. This idea was acted upon by the Council the following day, and Doctors Carl Johnson, P. F. Meyer, and F. J. Savage were appointed to represent the physicians. The Minnesota Nurses' Association has named Miss Ida M. MacDonald, 815 Essex Street, S. E., Minneapolis; Sister Mary Elizabeth, St. Francis Hospital, Breckenridge; Miss Mabel Korsell, present address, Powell Hall, Minneapolis. The Minnesota Hospital Association has named Mr. John Mitchell, business manager, Colonial Hospital, Rochester, Minnesota; Dina Bremness, superintendent, Community Hospital, Glenwood, Minnesota; and Sister Assumpta, superintendent, Hibbing Hospital, Hibbing, Minnesota.

The second important suggestion originated with Dr. Meyer of Faribault. To quote from his letter:

"We should evolve a forward-looking plan which would be constructive for the future, and not tear down the fine work so far accomplished in the education of our present-day nurses. The plan should take into consideration the present registered nurse, the future nurse, especially in regard to national Red Cross standards, and it should also safeguard the girls going into training in the smaller communities so that if they felt like going farther in their studies, that the work that they have previously done would be recognized.

"The plan that I would like to propose should involve the organization and supervision by the State Board of Nurses of the smaller community hospitals. The setting up of definite standards would be universally recognized so that these trainees, if they chose, could continue at larger training centers for further training to become registered nurses. If they chose only to take a two-year training period, they could be called certified nurses. Mrs. Hein's suggestion of a central school for basic training of three months or six months would fit well into such a plan. It would also insure a universal, sound, basic training upon which to build their future education.

"Some such plan, as this, would eliminate Dr. Johnson's protest about a poorer grade of vocational nurse. It would bring into line and under supervision all these smaller hospitals, and it would protect girls going into training in the smaller hospitals. It would not decrease the present standards that have been set up for registered nurses, and it would eliminate the present vicious practice of turning out vocational nurses which, if not curbed, will definitely undermine the present standards of nursing care in Minnesota."

The second meeting of this committee was held at St. Cloud, April 23.

Physicians, dentists, and pharmacists from the following counties were invited to this meeting: Stearns-Benton, Morrison, Todd, Douglas, Pope, Kandiyohi, Swift, Meeker, Wright and Sherburne: also the president and secretary of the State Board of Nurses' Examiners were present—a total of about eighty-five.

Dr. DuBois opened the meeting, and we quote some of his remarks.

"Doctors, dentists, nurses, and druggists are allied in their work and are interdependent and all of us must realize it. We are facing times we have never faced before, and we must have an allied front. In Washington there is a complete setup for socialized medicine. There will be many doctors who at the end of the war will have no particular place to go, and who can be shoved into government positions. We must be militant and let the public know that the ones who will suffer will be the public. Legislation should be watched with the public in mind, and as it affects the public it affects the professions. Anything can happen at the opportune time, and that may be at the end of the present conflict."

Talks were given by Mr. Slocumb, executive secretary of the State Pharmaceutical Association, Dr. DeVries, of the State Dental Association, Miss Newcombe and Miss Halverson, respectively president and secretary-treasurer, of the State Board of Nurses' Examiners, Dr. A. F. Branton of Willmar, representing the Minnesota State Hospital Association, and Dr. Proshek, of Minneapolis, as well as others who took part in the general discussion.

Miss Newcombe gave a comprehensive exposition of why we are short of nurses at the present time. Student enrollment of nurses has increased 22 per cent from January, 1937, to January, 1942. Graduate registration in the same period has increased 47.3 per cent, but public health nursing from January, 1937, to January, 1941, has increased by 4,000 nurses. Industrial nursing in the same period has increased by 1,000. Airlines and passenger trains have also taken a considerable number. Hospital regulations, providing for eight-hour duty only, have still further decreased the number of available nurses; marriages are in the same class, and lastly the war, with Red Cross and government services. Per one thousand men in the Army, the need is for six nurses, and in the Navy, three nurses. For the same number, seven doctors for the Army, and six for the Navy, and one and one-half dentists. The Army nurses' corps needs ten thousand more nurses before July first.

To off-set some of this shortage there is an increased enrollment of student nurses. Refresher courses are given to nurses who have retired for various reasons. There is a possibility that some former training schools may be reopened. Ward Aids, Red Cross Volunteer Aids, auxiliary hospital workers, and the girls who do active nursing in the smaller hospitals, which are not recognized training schools, are all contributing to off-set the shortage of registered nurses. In Minneapolis a nine months' course for practical nurses is offered by the Vocational and Franklin Hospitals. About one hundred are graduated yearly. Since July, 1941, the Federal Government has allocated $1,800,000 for nursing education.

It is apparent that the problems coming before this committee are not settled, and will require study over a considerable period of time.

F. J. SAVAGE, M.D., *Chairman*

## COMMITTEE ON MATERNAL WELFARE

The Committee on Maternal Welfare has prepared a pamphlet on "Nutrition in Pregnancy" to be distributed by the Minnesota State Medical Association and State Board of Health. The major portion of the energy and time of this Committee has been expended through the subcommittee which is studying the maternal mortalities throughout the state.

In 1940 the maternal mortality rate in Minnesota was 2.2 deaths per 1,000 live births. This figure is only one-half that for the total United States Birth Registration Area and represents the goal of Physicians and Public Health Officers of probably two decades ago. The Maternal Welfare Committee of the Minnesota State Medical Association became interested in the possibilities of further reducing this enviably low maternal death rate and in determining the absolute irreducible rate for the State. The Committee obtained the coöperation of

the Minnesota State Medical Association and the State Board of Health, these two organizations becoming the co-sponsors of a statewide maternal mortality study.

The very nature of the Committee's queries necessitated the formation of a fact-finding organization. To this end the Committee appointed a subcommittee made up of nine representative physicians doing majorly obstetrics and located in various districts of the State. This subcommittee became known as the Maternal Mortality Committee, the duties of which were to formulate plans for the collection of data, to study each death associated with pregnancy, and to evaluate the results of such individual studies.

The State Board of Health has supplied three investigators whose duty it is to collect the desired information. They are relatively young men doing obstetrics and gynecology as a specialty and have within the past few years completed training required for American Board certification. They are part-time employes of the State Board of Health. Their salaries are obtained from funds supplied by the Children's Bureau of the U. S. Department of Labor made available expressly for this study.

Shortly before this study was begun, each practicing physician in the State obtained a letter of notification from the Health Department which stated the purpose of the study, its sponsorship, and plan of survey as well as a request from each to cooperate in making this a complete study as early after the death as possible. The assistance given the investigator conducting each individual study has been most gratifying. However, reports of all deaths of mothers, connected with childbearing, are not being immediately forwarded by letter to the State Board of Health as requested and many deaths are not discovered until reported via the Bureau of Vital Statistics. This means that not infrequently the investigator gets to the scene of action a month or more after the death has occurred. In the interim, events surrounding the death have been forgotten or become unclear and the individual study thereby loses much of its value. The plan is to collect the data from the physician within a few days of the maternal death and prompt reporting of all deaths, though the connection with pregnancy may not seem clear, is urgently requested.

Cases are assigned in rotation to the three investigators who then visit the physician by appointment in order to fill out the form adopted by the Committee for recording of all apparently pertinent data. Besides this, the investigator summarizes the case in chronological order, paying attention to every detail. The case study is then turned over to one of the Committee members who writes a brief summary which includes only such information bearing upon the cause of death. At the next regular meeting of the Maternal Mortality Committee, these cases are presented, all identifying features being withheld. The anonymous case is then discussed from all points of view as regards the merits and demerits of its handling. It is graded on the basis of minimum standards adopted by the Committee for this purpose.

So far, the Committee has acted simply as a fact-finding organization. Each case study is complete in itself and these form excellent material for a basis of group discussions of many of the complications of pregnancy, labor and the puerperium. It is hoped that local medical groups such as hospital staffs, county societies, etc., will utilize these for educational purposes. The Committee would propose that the interested medical group write the State Board of Health, Director of Maternal and Child Hygiene. Some member of the Committee could then meet with the group to present the records as anonymous case studies and act as Chairman of the discussion group if desired.

Though the study has been in progress for less than a year, preliminary surveys indicate that an appreciable further reduction in the rate will be revealed by the end of the first year. In all probability the maternal mortality rate will approach 1.5 per 1,000 live births, i.e., a reduction of almost 50% in the former rate. The absolute irreducible rate may be found to be about one per 1,000 live births.

RUSSELL J. MOE, M.D., *Chairman*

DR. A. N. COLLINS, Duluth, Chairman of Reference Committee on Miscellaneous Scientific reports: It was recommended that the Child Health Committee be continued.

We feel that the work of the Diabetes Committee is a very important function of the State Medical Association. We hope this committee will continue active interest in the dissemination to the profession of such information which they may obtain from time to time in advancing the treatment of diabetes. We recommend a continuation of this committee.

The report of the Medical Testimony Committee was reviewed and found very interesting. The problem of local disagreement in legal testimony still possesses embarrassing features. The committee would suggest consultation from outside the local community in so far as this is possible. The point brought out in the report regarding confidential information in medical testimony is commended.

The report of the Ophthalmology Committee was reviewed and the activities of the committee are commended, also its excellent report.

The report of the Fracture Committee was reviewed, and the committee is to be commended for its interest and activity and should be continued.

The report of the Historical Committee was reviewed, and it is very evident that the excellent work being done by this committee is continuing and that it will redound to the credit of the Minnesota State Association. The committee appreciates the devotion to detail in the assembling of information relative to the history of the Minnesota Medical Association and recommends the continuation of this committee and its personnel.

The report of the Industrial Health Committee is very complete and outlines their activities for the year. It is very well presented and has the commendation of the reference committee.

The report of the Interprofessional Relations Committee was received and read with much interest. The comment made in the report that the problems indicated therein are not completely settled and will require further study suggests that this committee should be continued. The reference committee suggests that perhaps a Gallop pole of the medical profession of the state as a whole might be valuable concerning the nursing situation in the state, gathering information as to training courses and length of terms, etc.

The report of the Maternal Welfare Committee was carefully read, and it is felt that the committee is to be commended for the orderly manner in which the information has been assembled and reported. It is recommended that the committee be continued.

Five minutes being allotted to the chairmen of each of the committees, Drs. Kennedy and Piper read their reports to the delegates. The report of the Reference Committee on Miscellaneous Scientific reports was accepted.

The Speaker then called for the report of the Reference Committee on Officers' and Councilors' Reports, Dr. S. A. Slater of Worthington, chairman. The following reports were considered:

## REPORT OF THE SECRETARY

In spite of heavy added responsibilities and dislocations occasioned by the war, the Minnesota State Medical Association has carried on a full program of education, organization and public relations during the past year.

Chief among the special wartime tasks which the state office of the association has been asked to assume is the paper, organizational and secretarial work of the Procurement and Assignment Service in Minnesota.

This work has entailed many conferences and committee meetings and very close to the full-time attention of the executive secretary. In spite of it, more than the usual amount of field work has been carried on by the executive secretary whose trips have taken him to all parts of the state attending meetings and conferences, making investigations and generally looking after association interests.

It is obvious that the armed forces must make use of medical organization with its facilities for supplying information and for reaching officers and leaders of local medical societies. It is not at the present time in prospect that the War Department will find funds to finance such services. Physicians are therefore contributing not only their own services, in full measure, to the war effort but financing an important part of the machinery set up by the United States Army to complete its medical personnel.

With severe budget limitations ahead, the state office will continue to carry its share of added work and responsibility and, as in the year past, it will continue also to carry on the forward-looking program of education and social leadership mapped by its committees.

It becomes clear as the war advances that medical organizations will be called upon more and more, also, for enlightened leadership in the health instruction of civilians, in the distribution of scanty medical services and in the provision of care for the needy.

*No Truce for Physicians.*—There will be no truce for physicians who remain at their civilian posts during this war. They must take care of the civilian population at whatever cost to their previous plans for retirement. They must also unite to protect the status of medical practice and they must be more than ever watchful that no loopholes of reproach are left which will lead to government organization of their services at home.

The general public is keenly aware of the importance of civilian health to the war effort. It will be impatient of ob-

stacles and it will expect action. So long as physicians are clearly taking the lead through their own organizations in public education about such things as nutrition, preventive medicine, protection of the health of industrial workers and in provision of services to all, regardless of the absence of many of their number in the armed forces, efforts to take control out of their hands are likely to be unavailing.

*Leadership in Minnesota.*—The Minnesota State Medical Association has firmly established its leadership in Minnesota in the fields of health education and preventive medicine and in the redistribution of physicians to maintain essential services. This leadership must go on if the position of organized medicine in Minnesota is to be maintained in spite of an active minority which here, as elsewhere, remains alert to seize upon apparent lapses and failure as pretexts for reform.

*Office Mailing.*—During the past year the program of the association has developed in many directions. The amount of printed matter including posters, pamphlets, packets, leaflets and other publications, all of which originated in the office, was much more than quadrupled. The number of mailing pieces, on a conservative estimate exceeded 82,000 in addition to 830,000 enclosures on nutrition, vaccination and immunization. They were sent out as part of several special association programs.

*Vaccination and Immunization.*—Anticipating the May day immunization and vaccination program of the Children's Bureau by six months, the state association, in coöperation with the State Board of Health, launched a state-wide campaign to promote vaccination and immunization last November. Radio talks and interviews and newspaper publicity initiated the effort. Two posters, one urging vaccination and the other immunization, were distributed widely over the state, together with leaflets for distribution at meetings and with statements. The result of these activities in nearly all counties of the state was a great increase in the demands for vaccine and toxoid supplied for community programs by the State Board of Health.

*Nutrition Program.*—The current wide-spread interest in nutrition in which a variety of lay agencies have taken a directing hand clearly called for authoritative guidance and leadership. For that reason and because better nutrition for the civilian population is important to the war effort, an official medical project for better nutrition in this state was inaugurated by the association this spring, with the coöperation and joint financial support of the State Board of Health. Four simple practical pamphlets were published for free distribution in doctors' offices, the first for expectant mothers, the second for the child from two to six, the third for the average family of adults and children and the fourth for those who are overweight. At the same time, posters were prepared bearing the slogan "For a Stronger America Eat More of the Right Foods" and telling how to secure the pamphlets. These posters were sent out widely to grocery stores, food markets of all kinds all over the state and to other public gathering places where they were likely to reach housewives and food buyers. Members who have received the pamphlets are urged to give them wide circulation and to supplement them with nutrition information of authoritative character to patients, and in all public contacts.

*Tuberculosis Control.*—An important part of the association's expanded program of preventive medicine has been its tuberculosis control project which was sponsored by the Committee on Tuberculosis and which has brought nationwide attention to Minnesota. This project includes an accreditation plan for tuberculosis control by counties and an experiment in county-wide testing of the entire population of Meeker county with a view to extending similar measures to other counties in the state. The plan follows the outlines of the program of the veterinarians for eradication of tuberculosis among cattle and is completely described in the report of the committee. It is in line with the plan of leadership in all public health activities which the medical association has undertaken in Minnesota and it has stirred an unusual amount of country-wide interest as evidenced in the article by Robert Thompson entitled "Worth More than a Cow" which appeared in *Colliers'* and which described the Meeker county project.

*Pictorial History.*—The pictorial history, "100 Years of Medicine in Minnesota," which marked the centenary of the coming of Christopher Carli, first civilian practitioner to the Northwest territory in 1841, was published by the association last fall. This publication, unique among such efforts, took advantage of the centenary to publish pictures of historical interest and to bring the story up-to-date with as complete a picture outline as possible of the extent and quality of medical services today in Minnesota. The book was sent to all physicians in the state and to libraries, organizations, schools and public officials. It received notice in all national health journals and met with universal approval. Requests for it continue to come in from all parts of the United States but the first printing has been virtually exhausted. A second printing will depend upon the demand and future budgets of the association.

In addition to the above special projects the regular services of the association were carried on as usual.

*Packet Program.*—The "subject-of-the-month" program by which monthly packets to physicians are coördinated with public health education on the same subjects began as usual in October and ended for the season in May. Requests for the packets climbed to a monthly average of 700 with the number reaching to nearly 1,000 for especially popular packets. Lists of subjects are included in the report of the Committee on Public Health Education. The thanks of the association are due to the members who provided material for these packets and to the staff of the State Board of Health which provided statistical studies wherever possible. They constitute an ever more popular part of our service to members and the public.

*Radio Program.*—The weekly broadcasts over WCCO by Dr. W. A. O'Brien continued throughout the year, subject being selected to coincide and supplement packet subjects from October to May. This program is now in its 15th year and the oldest and most popular of all the sustaining programs on WCCO. In addition a large number of interviews and discussion broadcasts have been arranged in connection with special campaigns.

*News Service.*—The regular news service of the association was converted in January, 1942, from the former weekly news story release to a Question and Answer service to which nearly 200 papers are now subscribing. Each paper was provided with the mat for a standing two-column head bearing the headline "How's Your Health" on each, together with the address of the Committee on Public Health Education and an invitation to send questions to the committee headquarters at the state office for answers in print or by personal response on receipt of a stamped addressed envelope. So far the number of questions received has been highly satisfactory.

*County Officers' Meeting.*—Every component society in the state was represented at the County Officers' Meeting and dinner held at the Lowry Hotel, Saturday, February 28. The program was given over largely to special war requirements then shaping for medicine and attendance reached the unusual figure of 125. Dr. R. W. Fouts of Omaha, chairman of Procurement and Assignment for the Seventh Corps Area was dinner speaker.

*Recruiting.*—At the request of officials of the Seventh Corps Area, facilities of the State Office have been placed at the disposal of the Medical Recruiting Board which began operations for Minnesota physicians and dentists, Monday, May 25, at 496 Lowry Medical Arts Building.

The Board is part of two groups of recruiting boards operating respectively in the states east and west of the Mississippi. Officers are empowered to pass upon applications for commission and on physical findings and to administer the oath of office to qualified applicants for commission, in a minimum length of time. The objective is the procurement from the entire country of 16,000 medical officers for the U. S. Army, before December 31, 1942.

Names of applicants are checked with information on file with the office of the association.

Every possible assistance has been given to the recruiting office as part of the wartime service of the association. It is generally understood and agreed by all representatives of organized medicine that the present plan for allocating medical services to the armed forces and at the same time protecting the needs of the civilian population is better calculated to protect both the physicians and the public than indiscriminate recruiting through the Selective Service Boards.

The responsibility for supplying the armed services has been assumed by medical organizations for the first time and much will depend upon the success with which the plans of their organization, the Procurement and Assignment Service, are carried through.

It should be pointed out that there is no lack of disposition in several quarters in Washington to take the whole matter of supplying the extraordinary needs of the time away from the physicians. If that is done, the outlook for the private practice of medicine after the war in the United States will be dark indeed.

Right or wrong, the burden of proof now rests upon hard-pressed physicians. They must carry the load of providing personnel for the armed services and at the same time they must carry forward a vigorous, forward-looking program of preventive medicine and public health which will leave little excuse for government absorption of all medical services at home.

The State Office is equipped to provide the machinery and organization for this work. It depends upon officers and committees of the association to furnish the essential leadership. This they have done in full measure during the past year and the appreciation of all members as well as of the secretary's office should be extended to these men who have responded so willingly to all calls made upon them.

To the full-time staff, also, and to all who have aided in the far-flung program of the organization—but especially to the State Board of Health and its secretary and executive officer, Dr. A. J. Chesley who, with his staff has coöperated fully in every measure designed for the education and better health of the people of Minnesota—the appreciation of the secretary and of the organization should be extended.

It it a fact that without the close working relationship which exists in Minnesota between the State Board of Health and the practicing physicians, Minnesota's fine health record and our smooth, well-oiled machinery for the control and wise direction of all matters concerned with medicine and health in the state would be impossible.

The Committee on Public Policy, its faithful chairman, Dr. Sogge, and our attorney, Mr. Brist, form an integral and essential part of that machinery and their work, and Minnesota's model basic science legislation which they and their predecessors on the committee shaped and carried forward, are still the pattern toward which many other states are striving.

With this solid background of organization and achievement

there is little to fear except indifference or a false sense of security in our own ranks for medicine in Minnesota.

B. B. SOUSTER, M.D., *Secretary,*
R. R. ROSELL, *Executive Secretary.*

## REPORT OF THE TREASURER

The attached statement of cash receipts and disbursements for the year which ended December 30, 1941, was made by Shannon and Byers, Certified Public Accountants, who finished auditing the books of the association February 25, 1942, and found them to be correct in all respects.

A comparative summary of the finances of the association in 1940 and 1941 is provided on page 2 of the statement. It will be noted from this comparison that there was a net profit of $8,619.84 in 1940 while the net profit for the legislative year of 1941 was $2,763.35.

In view of the increased budget for 1941, it is obvious that the financial condition of the association continues sound. The program expanded in many directions during 1941 and, in spite of unusual wartime demands and the enlarged odd-year budget there still remains a small surplus.

Delegates and members are urged to study this statement carefully for a better understanding of the administration of association affairs.

W. H. CONDIT, M.D., *Treasurer.*

## STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED DECEMBER 31, 1941

CURRENT FUNDS

| | | |
|---|---|---|
| CASH ON HAND, December 31, 1940: | | |
| American National Bank, checking account | $ 1,540.49 | |
| American National Bank, savings account | 1,074.73 | |
| American National Bank, exhibit checking account | 1,828.26 | |
| American National Bank, exhibit savings account | 1,305.32 | |
| Farmers & Mechanics Bank, savings account | 5,281.93 | |
| First National Bank, savings account | 150.83 | |
| First Federal Savings & Loan Association | 3,113.05 | |
| Minnesota Federal Savings & Loan Association | 5,100.46 | $20,395.07 |
| CASH RECEIPTS, YEAR 1941: | | |
| Dues collected: | | |
| For year 1940 $ 146.25 | | |
| For year 1941 33,928.25 | | |
| For year 1942 3,195.00 | $37,269.50 | |
| Technical Exhibit rentals collected: | | |
| For year 1941 5,537.50 | 7,860.00 | |
| Annual meeting banquet and luncheons | 690.20 | |
| Bruce Publishing Co. (MINNESOTA MEDICINE) | 1,524.77 | |
| Interest | 168.07 | |
| Profit—diabetes committee | 162.30 | |
| Total receipts | | 47,674.84 |
| | | $68,069.91 |
| CASH DISBURSEMENT, YEAR 1941: | | |
| Special committees: | | |
| Historical | $ 16.46 | |
| Medical advisory | 16.41 | |
| Medical economics | 327.52 | |
| Public health education and radio | 5,102.75 | |
| Public policy | 10,977.41 | |
| State health relations | 50.80 | |
| Military affairs | 179.52 | |
| Unbudgeted committees | 372.57 | |
| Conferences and meetings: | | |
| Technical Exhibit and Annual Meeting | 8,231.28 | |
| Delegates and conferences | 432.55 | |
| Council meetings | 236.89 | |
| County officers' meetings | 371.20 | |
| MINNESOTA MEDICINE | 5,070.00 | |
| Office equipment | 1,228.21 | |
| Transferred to permanent investment | 10,000.00 | |
| Administrative: | | |
| Executive secretary's salary | 5,200.00 | |
| Executive secretary's expenses | 1,335.06 | |
| Office salaries | 5,490.00 | |
| Office salaries extra help | 30.00 | |
| Office rent | 1,440.00 | |
| Office supplies | 411.55 | |
| Postage | 393.30 | |
| Telephone and telegraph | 323.84 | |
| Miscellaneous expense | 275.43 | |
| Membership expense | 230.59 | |
| Audit and insurance | 274.09 | |
| Social security tax | 99.01 | |
| Periodicals | 64.25 | |
| President's contingent fund | 243.82 | |
| Secretary's salary | 200.00 | |
| Secretary's expenses | 79.39 | |
| Treasurer's salary | 100.00 | |
| Total disbursements | | $58,803.90 |
| CASH ON HAND, DECEMBER 31, 1941: | | |
| American National Bank, checking accounts | $ 368.30 | |
| American National Bank, savings account | 2,632.92 | |
| American National Bank, exhibit checking account | 692.06 | |
| American National Bank, exhibit savings account | 120.50 | |
| Farmers & Mechanics Bank, savings account | 5,388.36 | |
| First National Bank, savings account | 63.87 | |
| TOTAL CASH ON HAND | | $ 9,266.01 |

COMPARATIVE SUMMARY

| | Year 1941 | Year 1940 |
|---|---|---|
| *Income:* | | |
| Income from dues | $33,734.14 | $33,277.50 |
| Other income | 3,583.62 | 4,943.20 |
| | $37,317.76 | $38,220.70 |
| *Expenses:* | | |
| Special committees | 16,871.88 | 12,492.06 |
| Conferences and meetings | 1,060.99 | 1,126.60 |
| Administrative | 16,621.54 | 15,982.20 |
| | $34,554.41 | $29,600.86 |
| NET INCOME | $ 2,763.35 | $ 8,619.84 |

## THE CHAIRMAN OF THE COUNCIL

The program of the Minnesota State Medical Association has expanded to cover many new fields and activities, during the past year, and the work of the Council which approves each new project has been correspondingly varied and important.

Among projects discussed and approved during the past year the following should be mentioned:

*Blindness Survey.*—A survey of the eyes of all children under 21 is now being conducted in rural Hennepin county under the auspices of the Minnesota Society for the Prevention of Blindness, and the state association. This survey was undertaken because of the alarming number of eye defects found among selectees and because no information exists at this time about the actual condition of the eyes of children in the general population. At the request of Dr. F. E. Burch of the Minnesota Society, the Council this year appropriated $500 to this worthwhile study.

*Accreditation.*—Two counties have already been certified for tuberculosis control under the accreditation program of our Committee on Tuberculosis which was approved by the Council in October and by the State Board of Health at a subsequent meeting. This plan, modeled upon the successful program for control of cattle tuberculosis by the veterinarians, together with the current Meeker county experiment in county-wide tuberculin testing have put Minnesota at the forefront of all the states in tuberculosis control work.

*Prepaid Medical Service for FSA Clients.*—At the request of representatives of the Farm Security Administration, Council approval was given for the first time to an experimental program in prepaid medical service for FSA clients in two Minnesota counties. Ottertail and Morrison were the counties picked by the Committee on Low Income and Indigent Problems to which the arrangements were referred. No conclusive figures on results are available yet, since the plan has not been in operation for a year, but physicians, clients and FSA officials are working harmoniously in giving the plan a thorough tryout. Permission of the Council has recently been given to add another county to the group, provided local physicians approve.

*Program for Children with Heart Defects.*—Social Security funds for crippled children have made it possible for the Division of Social Welfare, under whose direction the work will be carried on, to institute an initial program in the Children's Hospital in St. Paul. Only children from nearby counties will be eligible for care. Later the program may be extended.

*History.*—Material so far gathered by the Historical Committee has been published serially in MINNESOTA MEDICINE and plans for publication in book form have been extensively discussed, both as to material and as to costs. It was decided to make a special effort to secure all material up to January, 1900, from all societies in the state and to ask every society which has not already done so to complete its history to that date as soon as possible. Final plans for publication will be made when all copy is in the hands of the committee, unless war conditions make a further postponement advisable.

*Fee Schedule.*—The new Schedule of Allowances for Medical Services prepared by the Division of Social Welfare has this year supplanted the earlier schedule and represents a considerable increase in allowances to be paid physicians for relief work. This schedule was drawn up on the basis of careful studies by the Division and also upon findings of a Council committee and the Council has officially affirmed its fairness to all concerned. This action represented a significant milestone in the relations between relief authorities in the state and the doctors of Minnesota. It came as the culmination of

a new coöperative program set up two years ago through which an official advisory committee of physicians became part of the machinery of the Division of Social Welfare with county advisory committees acting comparably for discussion and adjustment of all problems having to do with medical relief.

*Fifty Club.*—The Council approved a new section of our organization and a new feature for all annual gatherings with the institution of the Fifty Club at this meeting. This club will be made up of all members who have practiced fifty years or more in Minnesota. Some 60 are eligible for election at this meeting and all who are able to be with us will be guests of honor at the Annual Banquet Tuesday night.

*Finances.*—The finances of the association continue to be in excellent condition in spite of inroads on income made by the war. A surplus of about $2,800 remained on our books at the end of the fiscal year. The investment account is examined at intervals by the Council and adjudged to be wisely invested and in good condition to weather the dislocations of the times.

*Dues.*—The question of payment of the dues of members who leave for service with the armed forces has been discussed at length and, in accordance with the action taken by the House of Delegates in St. Paul, state dues have been remitted for those under grade of captain who applied by letter through their Councilors, showing their need for such relief. Many societies have taken action, however, to pay the dues of their colleagues in action by an assessment upon those who remain at home. This solution to the problem has become more and more popular and has been urged as far as possible upon all component societies by the Council. The work of the state society does not diminish in importance but in fact becomes more urgent as the war effort moves forward. For that reason it seemed necessary to the Council to deny a request from a few members for the return of dues already paid after they had left for active duty. It is as important for those who leave as for those who remain that standards of practice in Minnesota shall not change in their absence.

*War Activities.*—A resolution promising the aid of the Council and urging the coöperation of all members in promotion of all phases of improvement in civilian health, in coöperation with the Office of Civilian Defense and in the program of the Procurement and Assignment Service was passed by the Council in December.

In conformity with the spirit of that resolution, the state association has greatly expanded its program of public health education and has worked as closely as possible with civilian defense agencies and with the PAS.

At the request of Dr. A. J. Chesley, members of the Council agreed to meet with chairmen of city and county defense councils in their districts to coördinate and advise on all matters relating to local health and defense. Several such meetings have already been held and more are to follow.

*Nursing.*—The nursing situation is serious everywhere but particularly in the small hospitals of Minnesota. It has been brought to the attention frequently of the Council and the House of Delegates and, as a result of a series of joint conferences, a plan for a committee of nine members from the medical association, the Minnesota Hospital Association and the State Board of Nursing Examiners, to thrash out all phases of the question was approved by the Council. Drs. F. J. Savage, St. Paul; C. M. Johnson, Dawson; and P. F. Meyer of Faribault, were appointed to the committee from the medical association.

*Appointments.*—The Council proposed to the Governor the name of Dr. M. W. Alberts of St. Paul, to succeed himself on the State Board of Medical Examiners, with Drs. G. N. Ruhberg and James Dunn of St. Paul as alternates in that order. Dr. Alberts' term expires this year.

It is impossible to review in full here the routine work of the Council during the year touching, as it does, all manner of committee appointments, budget expenditures, finances, affiliate memberships, new and old problems of all sorts. The work must go on as it has in the past regardless of wartime hardships. This report would not be complete without again calling the attention of the House of Delegates and the membership to the excellent work done by our secretary, R. R. Rosell; the editorial work by Florence Fitzgerald; as well as the fine work done by Marion Hale, Irene Sanders, and Dorothy Peterson in their respective places. So long as the Council retains its present high level of deliberation and personnel, the interest of the public in these matters will be guarded equally with the interests of the medical profession.

W. L. Burnap, M.D., *Chairman.*

## COUNCILOR OF THE FIRST DISTRICT

Membership of the component medical societies of the first district (Freeborn, Goodhue, Mower, Olmsted, Houston, Fillmore, Dodge, Rice, Steele, Wabasha and Winona) has increased from 626 to 638 since the last annual meeting. The names of members who have joined the armed forces of the United States are included in the 638. At present (June 1, 1942) 138 physicians from this district have entered the service. In addition about 20 physicians who compose a hospital unit are expecting orders to active duty. Also, a naval unit composed of 11 physicians may be called in June.

Almost all activities have been dwarfed by those which pertain to the national emergency. In the first district there are 45 communities, each with a population of more than 500. Of these, 7 fall into the group which is classified as having a population of 10,000 or more. In addition there are 43 incorporated towns each with a population of less than 500.

On April 4, a meeting was held in Rochester under the direction of the executive officer of the State Board of Health. To this meeting were invited—

1. Members of the District Health Section
2. County Defense Council Chairmen
3. City Defense Council Chairmen
4. County Health Officers
5. City Health Officers

Many important issues were clarified and, as a result, work was initiated which has progressed steadily. One of the most tangible values which emerged from the meeting was the plan which was presented by Dr. J. F. Schaefer of Owatonna. This scheme for emergency medical service was so comprehensive that the "Owatonna plan" was immediately adopted as a working basis for plans to fit the needs of other communities of this district. Subsequently, Dr. Lester Breslow, district Health officer, visited Dr. Schaefer and Dr. J. A. McIntyre, city health officer of Owatonna and chief of the emergency medical service. Dr. Breslow secured the details of the plan which, with modification, has been found to meet the needs of other cities of similar class. Two features which should be included in each emergency medical service are as follows: 1. The service should be built around existing hospital and other permanent medical facilities and plans should exist for the employment of auxiliary facilities in case those which are permanent are incapacitated or overtaxed. 2. Any such service should be developed with an idea of permanency; that is, it should be designed for use in civilian disasters such as fires, tornadoes and floods, and not for wartime incidents only.

The chairman of the district health section soon will send a report blank to the chief of the emergency medical service of each community in order to obtain information for the state and national health sections. When filled out, this form will give the following information:

1. The names of the members of the emergency medical committee (The membership of this committee corresponds with that of the state health section committee.)
2. Name of the emergency medical chief and his alternate.
3. How much has been accomplished in conjunction with:
   a. Civilian Defense Council
   b. Local Red Cross
   c. District Health Office
4. The name of the hospital or hospitals, and provisions for emergency beds.
5. Auxiliary hospital facilities, armories, schools, churches and so on.
6. The number of medical nursing teams, available physicians, available graduate nurses, extent of auxiliary personnel, the number of ambulance drivers, stretcher bearers, victory aides, first aiders, cooks, undertakers and so on.
7. Surgical equipment, provisions for transfusions, dressings, instruments, medicaments, anesthetic agents, splints, blankets and so on.
8. Auxiliary ambulances and stretchers.

On May 25, the Minnesota State Hospital Association met in Rochester. Again Dr. Chesley was on hand and he arranged a meeting with Colonel Hunt, district representative from Omaha, and officials of the Hospital Association. Again much valuable information was released.

On May 22, Olmsted County became a tuberculosis accredited county by the award of the Accreditation Certificate for the control of tuberculosis. Dr. Chester Stewart, formerly of Minneapolis and now Head of the Department of Pediatrics of the Louisiana State University School of Medicine, was the guest speaker.

Problems regarding activities of several members of the state association, residing in the first district, have been brought to the attention of the Council and are now in the process of solution.

L. A. Buie, M.D.

## COUNCILOR OF THE SECOND DISTRICT

Nine counties in the Second Councilor District have passed resolutions that they will take care of the local and state medical association dues for any member who is serving in the armed forces of the United States. These resolutions have passed practically unanimously. We feel definitely that this is a duty we owe to the members who have to leave their practices and serve to protect us all.

We have all been more or less interested in the strenuous effort that the historical committee of the State Association has been putting forth to obtain a medical history from each county in the state. It has been a very arduous proposition we understand to get anyone interested enough in each county to do this work. One member of our district, Dr. R. C. Hunt of Fairmont, Minnesota, has accomplished something that in our opinion seems to be quite a masterpiece in this regard. He has written a history of Martin County that is very complete and has collected photographs of all the early practitioners in that county. He has had the history typewritten and put together in loose-leaf book form and he is at present working to get the history of Faribault County.

For any delegate who is interested in this line of work, I shall have this booklet at the registration desk at the Duluth

State meeting so that it may be examined. It might help others to formulate a history of their own county medical organization.

Our district has taken a good deal of interest in the medical economics of the state though they are not neglecting the scientific part in the practice of medicine. They are having many scientific meetings especially in the spring and the fall of the year, also there has been considerable activity in the vaccination and immunization programs.

L. L. Sogge, M.D.

## COUNCILOR OF THE THIRD DISTRICT

The membership of this district has held well, and shows a slight increase over the preceding year. This, I think, shows a healthy condition, and that membership is considered of value to its holders.

The payment of society dues of members in the Service, by the local societies, has, I believe, been generally practiced. This fine gesture of appreciation has been encouraged, with the hope of lessening the burden of the Parent Society, as well as aiding in the maintenance of the membership of those men who are making these sacrifices.

The component societies have coöperated fully with the State Association, and have maintained their high standards in regard to programs and attendance.

The Tuberculosis Program has been carried on with a great deal of satisfaction and success, and immunization against smallpox and diphtheria has been quite generally practiced.

The medical care of the indigent is coming to be more generally considered the responsibility of the public, thus lessening the burden of the medical profession, to some extent.

The Minnesota Hospital Service Association, providing hospitalization on a prepayment plan, is rendering satisfactory service, and is being well received in the farming communities. It is to be heped that if a plan for prepayment of medical services is ever adopted, that it may serve with equal satisfaction.

The war has not lessened, but rather heightened, the interest in organized medicine by the members of these societies.

This, in the opinion of the councilor of this district, justifies an optimistic outlook upon the future of our profession.

Carl M. Johnson, M.D.

## COUNCILOR OF THE FOURTH DISTRICT

Affairs in the Fourth District have been running smoothly during the past year. Special interest has been focused on matters pertaining to the war effort and the preparation of proper lists for the Procurement and Assignment Committee, from which to choose available Doctors for Army and Navy service.

One case of threatened malpractice against a doctor in the District has been satisfactorily adjusted through the efforts of the Society's Committee, after personal interviews with those involved.

The Minnesota Hospital Service Association has extended its arrangements with additional hospitals in the District, and one hears but favorable comment in regard to the service.

We have been instrumental in helping to gather data for the Historical Society, and further work in this regard is to be done.

Civilian defense, as it pertains to Doctors and the Hospitals, is being developed.

The program for immunization and vaccination in schools is well taken care of.

Of most importance at the present time is the proper adjustment to war practice for civilian as well as military service, and while this has been put in the hands of a Procurement Committee, your Councilor is frequently called upon to help and advise in this matter.

I wish to express my appreciation for the coöperation of the Society and officers of this District.

A. E. Sohmer, M.D.

## COUNCILOR OF THE FIFTH DISTRICT

The most gratifying accomplishment in this district during the past year was the reactivation of the Dakota County Medical Society. A meeting of all physicians of Dakota County who had signified their desire to reconstitute the Dakota County Medical Society was held at the Lowry Hotel, St. Paul, on Friday, April 10, 1942. Dr. L. S. Burns of South St. Paul was elected President and Dr. A. J. Emond of Farmington was elected Vice President, and Dr. A. H. Field of Farmington was elected Secretary-Treasurer. It was a great satisfaction to have this society functioning again as there has been a very definite need for it.

Coöperation was extended to the Minnesota Hospital Service Association in obtaining membership of the Rush City Hospital and the Emond Community Hospital of Farmington, Minn.

Two meetings of the Washington County Medical Society were attended. A very entertaining program was presented at each meeting.

The first meeting of the newly activated Dakota County Medical Society was to be held June 9 at Hastings and the Councilor was scheduled to attend this meeting.

Nothing else of unusual interest has occurred in this district during the past year.

E. M. Jones, M.D.

## COUNCILOR OF THE SIXTH DISTRICT

I wish to submit the following report from the Sixth District, comprising Hennepin and Wright Counties.

| Membership | May 1, 1941 | May 1, 1942 |
|---|---|---|
| Hennepin County | 642 | 663 |
| Wright County | 18 | 19 |
| Total | 660 | 682 |

There are ten applicants for membership at the present time, a number which is considerably below the normal, due to the fact that many prospective applicants are in military service.

As of June 8, 1942, Hennepin County had a total (in all classifications including three Junior members, two visiting members, and three applicants) of 76 members in military service, or under orders to report for duty. In addition, approximately 55 medical men from Hennepin County, who are not members of the Society, are in the service, so that there are about 131 physicians from this District in the service.

The need for any special organization among the remaining physicians in civil practice, to take care of the civilian population, has not yet been acutely felt, and will be met as the occasion arises.

An organization known as Group Health Mutual, formed for the purpose of providing prepaid medical care, attempted, something over a year ago, to enter into a contract with an organized group in Hennepin County for medical care for its clients. The proposed contract was presented before the Executive Committee of the County Society, where it met with opposition. The plan was then altered, so as to include, among those whose services would be accepted by Group Health Mutual, other groups of physicians who could come within the definition of a Clinic, as stated in the contract. This was presented before a special meeting of the County Society, by representatives of Group Health Mutual. The meeting was attended by a large number of members of the Society, and the subject was freely and fully discussed. The consensus of the meeting was that the plan failed to provide free choice of physician by the patient, and that it violated the principles of medical ethics. It is rumored that Group Health Mutual has now under consideration a plan providing free choice of physician by the patient. This would, apparently, remove the most serious objection to the presentation of such pre-payment plan to the public.

Stephen H. Baxter, M.D.

## COUNCILOR OF THE SEVENTH DISTRICT

Influences of the war upon physicians in the Seventh Councilor District have intensified medical and scientific interests and decreased concern over economic problems, it appears. This change of interests may be due to the number of physicians called into the service and the consequent heavier demands for medical service on those remaining; or it may be due to the decreased number of indigent persons resulting from war-production employment.

In this district, eleven communities have no physician. Seven of these villages have never had a physician and the remaining four have had a physician in residence only intermittently. All of them are near enough to cities or villages having physicians that adequate medical care is within reach of their residents. In larger villages and cities in the district, induction of physicians into the service has increased the practice-load of the remaining physicians.

In the field of medical economics, the Morrison County Medical Care Plan of the Farm Security Administration has revealed interesting data. Each participating family pays $22.00 a year for medical care. Of the 450 Farm Security Administration families in the county, 219 are participants. During the first eight months of operation $2,900 in bills have been presented. Of these, $2,300 worth have been paid, and $400 remains in the fund to be distributed among participating physicians in proportion to services rendered at the end of the first year. Thus, 60 per cent has been paid, and distribution of the accumulated $400 now would raise this figure to 70 per cent. This compares favorably with the amounts paid by indigents, marginally indigent persons and agencies responsible for them. A survey made of the 231 nonparticipating families reveals that only $400 worth of medical care was had, and of this amount less than 50 per cent was paid.

Edwin J. Simons, M.D.

## COUNCILOR OF THE EIGHTH DISTRICT

Practice in the eighth district continues in a manner satisfactory to the profession and pleasing to the citizens (though some still prefer a chiropractor).

I have covered the district as thoroughly as possible and have been impressed with the progress and universal high standards of practice maintained as well as the fine spirit of comradeship exhibited.

There are beautiful, new, well-equipped hospitals recently opened and the older ones show continuous improvement. This is mostly a reflection of the doctors' efforts and they are prepared to turn added facilities to the betterment of the patients.

There are two chief sources of this leaven which is quietly raising our standards.

(1) The excellent work done by the committees of our society in gathering valuable information and dispensing it to the best advantage. This work could not be so well done without the judgment and organization ability of our Secretary, R. R. Rosell; the editorial ability of Florence Fitzgerald

and the cheerful services rendered, each in her place, by Marion Hale, Irene Sanders and Dorothy Peterson.

(2) The short courses offered at the Center of Continuation Study at the University. The opportunities there under the able direction of Dr. O'Brien supported by the faculty of the medical school, of course including the Mayo Foundation, surpass those offered anywhere else in the world and the profession would be a dumb lot if these failed to have the desired effect.

Let us continually look forward so that Minnesota may ever lead the nation and the world.

W. L. BURNAP, M.D.

### COUNCILOR OF THE NINTH DISTRICT

Activities of this component of our organization have again kept pace during the past year with current responsibilities and obligations. It may be noted that, as the preliminary reports came in on the raid on Pearl Harbor, the president and executive secretary of our state association were in conference in Duluth with the local committee on arrangements for the preparation of our annual meeting. In the passing six months members have shouldered many added duties, professional as well as civic, in this total war effort. The district has assumed vital importance in the impetus given iron ore production, shipbuilding and manufacturing of military materials.

Twenty-nine members of the society have entered various departments of military service. Through additional assessments their membership has been continued and will be for the duration. The membership has been advised of the need of continuing the important work of the state association.

On May 11, in accordance with the organization of the Health Section of State Welfare Defense Committee, a meeting was held for the purpose of further coördination of the medical phases of civilian defense in the ninth councilor district. Forty representatives conferred the entire afternoon on all matters that concerned health, hospitals, nursing and sanitation as they pertained to the program. The health officers and chairman of defense councils of six cities and seven counties received valuable information from several of the federal and state authorities. The latter included: Senior Surgeon Wallace D. Hunt, Medical Officer of the 7th Corps Defense Region; Mr. James Campbell, Secretary of the Welfare Defense Committee, Minnesota Defense Council; Major Paul Dwan, First Minnesota Battalion. Appreciation is extended Dr. Chesley, Chairman of the State Health Section for his major part in organization of the program. It is felt that this meeting had accomplished a good purpose in clarifying the responsibilities of those concerned in the entire district.

Immunization was recently well extended in a program by the Director of Public Health of Duluth, Dr. M. McC. Fischer. Seven thousand were vaccinated against smallpox and the same number against diptheria in a single drive. It is estimated that at present 68% of the population is vaccinated against smallpox. In the county area there has been also considerable extension of this program under Dr. C. A. Scherer.

Some time ago, an exhaustive survey was made of medical relief in St. Louis County by the U. S. Public Health Service, which concluded with a formal report of recommendations. Evidence of an assumption of this constructive program is the engagement of the Director of Public Health of Duluth in part-time office to act as medical director for the County Welfare Board. This is a very progressive step, which will be of value to the agency, client and profession. Our contact committee has done excellent work the past year.

On approval of the Council, representatives of the FSA presented an offer to the physicians of Carlton county to participate in a prepaid medical plan, now in effect in two other counties of the state. They decided not to accept the plan for the time being.

F. J. ELIAS, M.D.

DR. S. A. SLATER, Worthington, Chairman of Reference Committee on Officers' and Councilor's Reports:

*Report of the Secretary.*—The committee takes cognizance of the increasing amount of work that the secretary and executive secretary are called upon to do and want to compliment them on how well they are meeting the unusual situation that is brought on by the war conditions. The report is most gratifying, and we recommend its adoption.

*Report of the Treasurer.*—This report was examined by the committee, and it was very gratifying to note that the dues for membership for 1941 increased over 1940, and there was a nice surplus each year. The condition of the Association seems to be in excellent shape, and it is recommended that the treasurer's report be adopted.

*Report of the Chairman of the Council.*—The committee was very much impressed by the report of the chairman, Dr. W. L. Burnap, on the work of the Council. They seem to be doing everything possible to keep the Minnesota Medical Association in the forefront in advancing medicine. A number of new projects have been undertaken, and excellent judgment has been shown. They modestly admit that it is too early to draw final conclusions. The committee realizes from Dr. Burnap's report that the duty of the Council is ever increasing, but they are doing a most excellent job, and it is recommended that the report of Dr. Burnap, the chairman, be approved.

*Reports of the Councilors.*—Dr. Buie's report as councilor of the first district was most complete. It shows that the district is in a healthy condition in that the membership in the component societies has increased. The committee was impressed by the large number of physicians in military service at this time, the number being approximately 170. The committee was particularly interested in the emergency relief plan originated by Dr. Schaefer and Dr. McIntyre of Owatonna. They are to be commended on their organization endeavoring to use the existing facilities for not only war emergencies but any other emergency that might arise. It is an undertaking that might well be applied to other communities.

It is highly gratifying in reading the reports of the councilors of the other eight districts to find all in excellent condition. All indicated that the war had brought on conditions which the several districts were meeting in a most gratifying manner. It was gathered from these reports that the physicians throughout the state are arising to the occasion and assuming whatever added responsibility placed upon them. We recommend the approval of these reports.

It was moved, seconded and carried that the reports be accepted.

The Speaker then called for the report of the Reference Committee on State Health Relations reports, of which Dr. O. J. Seifert of New Ulm was chairman. The following reports were considered:

### COMMITTEE ON STATE HEALTH RELATIONS

#### PART A

In response to a letter from Dr. C. E. Proshek, the Council in December, 1940, referred to the Committee on State Health Relations the problem of possible improvement of the coroner system in Minnesota.

The problem has been discussed several times by the committee and has been further studied by a subcommittee under Dr. Boleyn, with the assistance of Mr. Brist, attorney for the Minnesota State Medical Association, Drs. Bell, McCartney, and Clausen of the University Pathology Department, Drs. Giffin and Souster and Mr. Rosell.

While our studies are not yet complete, we believe that:

1. A State Medical Examiner's Office should be established in charge of a Chief Medical Examiner (who would be a competent pathologist with a certificate of the American Board of Pathology) assisted by:
   a. an Assistant Chief Medical Examiner (with similar unquestionable qualifications) who would be the traveling pathologist, available for assistance to coroners and law enforcement officials throughout the State, and
   b. A toxicologist (a chemist with adequate special qualifications) who would be similarly available.

2. The State Medical Examiner should have a central office in St. Paul or at the State University and the toxicologist should have an office and laboratory at the State University.

3. The State Legislature should provide funds for the Chief Medical Examiner and his Assistants. We are studying the practicability of a nominal fee charge to counties for work done.

4. Changes in the qualifications and duties of County Coroners and their relationships with the State Medical Examiner's office are desirable if possible.

5. The State Medical Examiner should be given definite and incontrovertible legal authority to order a postmortem examination by a competent pathologist whenever he may feel it to be necessary in the interest of justice.

6. That it should be made mandatory that coroners and others notify the County Sheriff, County Attorney, State Bureau of Criminal Apprehension, and State Medical Examiner of all cases of sudden unattended or suspected violent deaths.

We hope that the members of the State Medical Association will take an active part in discussion of the problem and promotion of some adequate solution. With that in view, we

have in an exhibit at this meeting copies of various laws in force elsewhere and various other pertinent material, including our suggestions. Inquiries and suggestions sent to the Committee through the Secretary's office will be appreciated.

We hope, because the Legislature will meet next winter, that the House of Delegates will authorize the Council, and the Committe on Public Policy, to bring before the Legislature the proposals that will have been developed after further hearings and discussions.

PART B

It has been reported from reliable sources that efforts to consolidate still further several departments of the state government and to "complete" the so-called "streamlining" begun four years ago in Minnesota by Governor Stassen will be renewed in the next session of the legislature.

Any attempt to subject departments dealing with public health and medical services to lay domination from other departments of the state government has been regarded from the first as unwise and undesirable by all physicians of the state.

In view of the fact that an effort was made at the last session to subordinate both the State Board of Health and the Division of State Institutions to the Division of Social Welfare, and in view of the fact, also, that further attempts are likely to be made to destroy the independence of the Basic Science Board and the State Board of Medical Examiners, the following plan is proposed by this committee:

1. That the State Board of Health be maintained as an independent board of nine members appointed by the Governor, as they are at present, from recommendations made to him by professional bodies.
2. That, if it is deemed advisable to change the Division of State Institutions, the institutions having to do with health and medical care be subordinated to the State Board of Health as the only competent professional department in the state government, and not to any lay division or department.
3. That the State Board of Medical Examiners and the Basic Science Board be maintained as independent, self-supporting boards and that no move be made to coördinate their functions and income with those of other licensing boards.

T. R. Sweetser, M.D., *Chairman.*

## COMMITTEE ON UNIVERSITY RELATIONS

The Committee on University Relations begs to report that nothing has been referred to this committee during the present year.

Harmonious relations seem to exist between our Association and all departments of the University and especially are we in excellent relations with the Medical School.

B. J. Branton, M.D., *Chairman.*

## COMMITTEE ON PUBLIC POLICY

Since the last annual meeting of the State Medical Association there has been no legislative session; hence, nothing to report in State legislative matters. But your committee has not been wholly inactive as far as national legislation is concerned.

We have kept in touch with our two United States Senators and all the members of the House of Representatives on several issues pending in Washington. The Minnesota delegation in Congress has been very cooperative and all have promised to do their utmost in opposing certain legislation that we felt would be very detrimental to the public health of the Nation.

We have also urged, and the whole delegation at Washington is doing all in their power to have medical, hospital, dental and pharmacy bills deductible under the new income tax law. In view of the fact that the personal exemptions are constantly being whittled down, and the tax rates increased, it seems to us only fair that the taxpayers be given some consideration along the lines suggested. The Government is stressing the importance of the American people keeping well, and we know of no better way to encourage them than to permit such a deduction. We have contacted Congressman Knutson of Minnesota, who is on the powerful House Ways and Means Committee where the tax bill originates, and he is doing his best to make those expenses deductible. The Treasury Department has recommended a deduction for extraordinary medical and hospital expenses—we do not believe this is the proper solution to the problem, but that it should be approached from the standpoint of encouraging people to safeguard their health and making such expenses deductible up to a certain percentage of income, the same as money expended for church or charitable purposes.

We had hoped that such a provision would have the support of the Board of Trustees of the American Medical Association, but we understand that so far the Board of Trustees has declined to take such action. Dr. William Braasch of Rochester, who is a member of the Board of Trustees, has told us that he has done all he could possibly do to secure such approval. There have been times when we felt tempted to make direct contact with other State Medical Associations in matters such as this, but so far we have not done so.

Your Committee on Public Policy is now appointed in the even numbered years to serve for two years, the reason therefor being self-evident. There have been only one or two changes in the personnel of this committee since the death of Dr. Johnson. We have made no change in the modus operandi for the reason that Dr. Johnson was the originator of our present setup and he did such a splendid job that we have not been able to improve on his methods.

Your Committee most respectfully asks that this House of Delegates bring to every member of their respective societies, the importance of taking an active interest in the 1942 elections. This year the state primary will be in September and the final election in November. In addition to electing a governor, a lieutenant governor, an attorney general and other state officials, 67 state senators and 131 state representatives are to be elected. This constitutes the entire membership of the Legislature. In view of wartime conditions and the many problems that naturally arise during such times, it is most important that our lawmakers from every legislative district, be men and women with good judgment and a desire to do what is best for all the people of the State. Most members of the present Legislature have been extremely conscientious in promoting good public health. Unfortunately, however, there are a few members who have not; the former group should be actively supported in the event they file for reëlection, while the latter group should be retired to private life.

L. L. Sogge, M.D., *Chairman.*

Dr. O. J. Seifert, Chairman of Reference Committee on State Health Relations: Your Reference Committee on State Health Relations respectfully requests that the House of Delegates accept these reports.

We wish to call your special attention to the report of the Committee on State Health Relations with reference to the improvement of the coroner system in Minnesota, calling for the establishment of a State Medical Examiner's office in charge of a competent pathologist strongly advised.

Dr. B. J. Branton reports harmonious relations existing between our Association and all of the departments of the University, especially with the medical school.

The Committee urgently requests you to study the report of the Committee on Public Policy with reference to legislation. This is very timely and of interest to each and every one of us.

Your Committee respectfully requests the acceptance of these reports.

Dr. Seifert: I think we have all had knowledge of incompetent post-mortem examinations in case of accident and with testimony given in court on the basis of such examinations. The establishment of a State Medical Examiner's Office, headed by a Chief Medical Examiner, is greatly needed and strongly advised.

In respect to the report of the Committee on Public Policy, the committee strongly urges every member to read and study it. We must watch legislation and maintain our organization. Our dues are our insurance premium, cheap insurance in fact. So let us be alert as Dr. Gavin told us and let us not be niggardly about our dues.

The report of the committee was unanimously adopted by the delegates.

The Speaker then called for the report of the Reference Committee on Lay Education reports, Dr. N. H. Baker of Fergus Falls, chairman (substituting for Dr. R. M. Burns of Saint Paul.)

The following reports were considered.

## COMMITTEE ON PUBLIC HEALTH EDUCATION

It will be recalled that by the reassignment of committees made last year by the Council, the chairmen of seventeen scientific committees, together with chairmen of the editorial and radio subcommittees now compose the executive body of the Committee on Public Health Education.

I am pleased to report that two successful and important meetings of the whole committee were held during the year, and at each meeting at least 75 per cent of the committees were represented and made reports.

The first meeting was held in Duluth in July, 1941, and the second was held in connection with the County Officers meeting at St. Paul, February 28, 1942. At both of these meetings the various chairmen or their representatives gave full and detailed reports, and I wish to assure the members of the State Society that none of these committees is idle or dormant.

In this year of upheavals and upsets; of men entering the various services of our country and of traveling about—it does not seem wise or necessary to put into this report much detail or explanation. In the circumstance that I now proceed to list some of our major activities, it must not be assumed therefrom that omission of certain others indicates either lack of appreciation or interest. It simply means that within the reports ultimately coming to the membership through the Council, the efforts of all these committees will be made known.

1. Our central office, through Mr. Rosell and his staff, very adequately presented and commemorated our centennial

with the beautiful photographic reproduction of buildings, doctors, hospitals, personalities—all making graphic and obvious the route whereby our society has attained its commanding position within our state. This booklet should be kept and prized by all our members and all the institutions to which copies were assigned.

2. Reference should be made to the part our committee members took in the County Officers meeting in St. Paul as of February 28. This is an annual roundup, sponsored and financed by our State Society, and the greatest good comes from it. It is likely that county societies, keeping certain individuals like their secretaries in key positions for several years, do secure the advantage that comes from keeping that individual in touch with state events. It might seem more desirable, however, to shift the offices, and give more men contacts thereby with such meetings as this annual conference.

3. The Vaccination and Immunization campaign began with newspaper and radio publicity in November and included wide distribution of two posters, one urging vaccination and the other immunization, together with small leaflets on each for distribution, with doctors' statements, at meetings, etc. The result over the state has been an unprecedented increase in vaccination and immunization, judging by amounts of vaccine and toxoid distributed by the State Board of Health.

4. Nutrition. The great increase in interest in the general nutrition of our people, the advances made in investigation of deficiencies and avitaminoses, have enlisted the interest of your Health Committee. Working with the State Board of Health, four folders have been developed: one on nutrition for expectant mothers, another for the child two to six, a third on nutrition for the average family, and a fourth on reducing, have been sent to members. Various food handlers are also to get posters, also restaurants and drugstores, emphasizing the slogan "For a Stronger America Eat More of the Right Foods," and urging people to ask for nutrition folders that are available from their doctors without charge or cost.

5. The regular Weekly News Service this year has been converted to a Question and Answer service called "How's Your Health"; 160 weekly papers are using the service regularly.

6. The Radio Broadcasts, under the guidance and direction of Dr. William O'Brien, continue with ever-increasing interest and enthusiastic approval of the medical and the lay public.

7. Packet Service—Packets were prepared and distributed as part of the Coördinated Medical and Public Health Program of the Association.

Their popularity is amply attested by the growing demand which has mounted from a monthly average of 400 last year to 650 for the past eight months with requests reaching a high of 976 for one packet and 833 for another. The thanks of the committee and the association are due to the men who have contributed the fine material assembled for these packets.

8. The Tuberculosis Survey is now arriving at a point where results are scoring heavily. In the May 2, 1942 issue of *Colliers' Magazine* you will find an article by Mr. Robert Thompson giving a popular version of the work done in Meeker and adjacent counties in following up tuberculosis surveys, and finding the sources within family groups of open cases of tuberculosis. This is a story of the widest human appeal. It is captioned "Worth More Than a Cow"—harking back to the obvious circumstance that there is no longer any tuberculosis in the cattle in Minnesota, but implying that the Mantoux program, if carefully followed up with x-ray films of the positives, goes a long way toward ridding our state of human tuberculosis. The physicians in Meeker and adjacent counties who have given so much of their service and time to this worthy work deserve the praise and commendation they will get not only from the public but from the doctors who more fully appreciate the contribution they have made. Dr. Myers and Dr. Stewart (now in Louisiana) worked for a long time without the medical support which is now accorded them so freely wherever the anti-tuberculosis program pushes on.

9. The Red Cross. Naturally the Red Cross has come to the fore with a situation and a demand unprecedented. Dr. John S. Lundy has enlarged the program at Rochester through some utilization of a method of teaching Red Cross through radio broadcasting. He points out, however, that for varied and obvious reasons our doctors should step into the Red Cross program of teaching, instruction and information to Red Gross groups, with the desire and intention to follow the Red Cross book of instructions and manual. This subject was editorialized in the pages of MINNESOTA MEDICINE for the April issue, and the reasons were outlined why, despite the doctor's urge to vary his instructions somewhat according to his own experience and most recent reading, nevertheless, for the good of all concerned and for uniformity, the method devised by the Red Cross should be adhered to as strictly as possible.

10. Wherever possible the Educational Committee expects to coöperate and to lead wherever the war exigencies will dictate. At any time we may be called upon to advance the collection of blood for desiccation on a huge scale to meet the treatment of shock, both civil and military, that may arise at any time. Suggestions are asked for from the membership for any movement along these general lines that seems to any individual to be essential and worthwhile. Such suggestions should be sent directly to Mr. Rosell.

The Committee thanks Dr. Albert Chesley and the State Board of Health for their coöperation in sponsoring the nutritional program and for timely coöperation in all other fields wherever possible.

E. L. TUOHY, M.D., *Chairman.*

## EDITORIAL SUBCOMMITTEE OF THE COMMITTEE ON PUBLIC HEALTH EDUCATION

The duties of the *Editorial Sub-committee of the Committee on Public Health Education have not changed.* It is understood that the desire of the Association is that this subcommittee continue to act in an advisory capacity only. Most of the affairs that would be referred to such a subcommittee can be, and are, taen care of by Mrs. Fitzgerald, of the central office of the Association.

Since the last annual meeting, however, the chairman of the subcommittee was asked to look over the page proof of the pictorial booklet "One Hundred Years of Medicine in Minnesota." These proofs had to be received when available and released immediately. Therefore, it was not possible to call a meeting so that all members of the subcommittee could view the proofs. The chairman did call in for consultation, however, the President of the Association and a member of the Council, who reside in the same city with him.

Also, the chairman of the subcommittee attended a dinner meeting called by Dr. Tuohy, General Chairman of the Committee on Public Health Education. This meeting was held in St. Paul on February 27, 1942. The morning after the dinner the chairman of the subcommittee attended the meeting of the Committee on First Aid and Red Cross. Thereafter he helped Dr. Lundy, chairman of that committee, write a few paragraphs which were turned over to Dr. Tuohy and used by him to further the work of the Committee on First Aid and Red Cross.

Although, as far as the chairman of the subcommittee knows, review of any other material by a member of the subcommittee has not been needed, many activities with an editorial slant have been noted, with interest and approval: (1) the methods used in the vaccination and diphtheria campaigns; (2) the article from the January, 1942, issue of the "Journal of American Insurance" entitled "Abuses of Medical Testimony—the Minnesota Experiment"; (3) the article from the May 2, 1942, issue of *Collier's,* entitled "Worth More Than a Cow" which was preceded by the editor's gloss reading, "That's what they think of human beings in Meeker County, Minnesota. Since Meeker led the nation in saving cows from tuberculosis it is now doing as much for man."

Moreover, the old standbys, the packets of the month, are always of interest and, when desirable, they emphasize timely topics: Nutrition (October); Influenza and pneumonia (November); Coronary disease (December); Endocrine therapy (January); Emergency surgery (February); Cancer of the breast (April); Poliomyelitis and encephalitis (May).

Other efforts, such as the radio work, the college lectures and the sight survey have been noted. Still others, not mentioned here, doubtless will have their place in reports of other committees.

RICHARD M. HEWITT, M.D., *Chairman.*

## SPEAKERS' BUREAU OF THE PUBLIC HEALTH EDUCATION COMMITTEE

The Speakers' Bureau has functioned chiefly this year as the agency through which the College Lecture Course has been arranged and speakers selected.

As in previous years, two lectures were offered to each of the colleges of the state (except the University of Minnesota) and a total of twenty-seven lectures was given in fourteen colleges during the year.

Subjects for the 1941-42 course were:

Healthy Skin and Hair
The Appendicitis Problem
Fit to Fight
Adjusting Women to Their Jobs
Mental Fitness
Saving Sight and Hearing
Quackery, Drugs and Doctors

The following colleges participated:

| | |
|---|---|
| College of St. Teresa | Winona |
| St. Mary's College | Winona |
| State Teachers' College | Winona |
| Gustavus Adolphus | St. Peter |
| Carleton College | Northfield |
| State Teachers' College | Moorhead |
| Concordia College | Moorhead |
| State Teachers' College | Bemidji |
| Worthington Junior College | Worthington |
| College of St. Benedict | St. Joseph |
| St. John's University | Collegeville |
| St. Olaf's College | Northfield |
| Augsburg College | Minneapolis |
| St. Thomas College | St. Paul |

Speakers were P. A. O'Leary, C. W. Mayo, Rochester; W. A. O'Brien, University of Minnesota; Nora Winther, University of Minnesota, F. J. Hirschboeck, Duluth; F. W. Lynch, St. Paul; J. R. Earl, St. Paul; R. A. Jensen, University of Minnesota; F. T. Becker, Duluth; O. B. Patch, Duluth; J. A. Hilger, St. Paul; D. W. Cowan, University of Minnesota.

Talks have also been arranged in response to requests from parent teacher groups, community health associations, luncheon clubs and church groups.

For county medical society meetings a list of speakers and subjects was prepared for the first time this year under aus-

pices of the Speakers' Bureau. The list was sent to officers of all component societies to aid them in arranging their scientific meetings. Speakers on the list all expressed their willingness to appear without remuneration.

Out of the activity of this bureau over a period of years a small but excellent group of speakers has been developed who can be relied upon to speak effectively before lay groups of all types.

There is no indication that the war emergency will lessen the call for speakers on health and medicine, however, and there is a definite need for more men to undertake this exacting but important phase of public health education.

F. H. MAGNEY, M.D., *Chairman.*

## RADIO REPORT

For the past year the Minnesota State Medical Association has sponsored a program each Saturday from 10:15 to 10:30 a.m. over radio stations WCCO, Minneapolis and St. Paul; and WLB, University of Minnesota; also KDAL in the first nine months. The speaker has been William A. O'Brien, Director, Postgraduate Medical Education, Medical School, University of Minnesota.

The last broadcast in each month was sponsored by the Minnesota State Dental Association. The Dental Association has again expressed its appreciation to the medical profession for this coöperative effort. The subject material for each month except during the summer was keyed with the educational packet issued by the Minnesota State Medical Association for physicians.

Radio Station WCCO has given time to the Minnesota State Medical Association each week since April 4, 1928 (over fourteen years) for which we should be duly grateful, as it is the most powerful station in the Northwest.

A new program was started September 25, 1940, over radio station WLB, entitled "Your Health and You." It was given Wednesday from 11:00 until 11:15 a.m. for pupils in school grades, six through nine. Students listened in groups with the teacher. For wider coverage, radio station WLB sent the program over the North-central Broadcasting System (Mutual). The programs were arranged by Dr. William A. O'Brien, who gave each talk. The program is endorsed by the Minnesota State Medical Association and the Minnesota Public Health Association. It was learned through a survey that more than 9,000 school children "attended" these public health classes. If wider publicity and greater coöperation are given to this effort, more junior high schools will take the program next year.

In addition the radio spokesman appeared on the following programs:

| | | |
|---|---|---|
| University of Minnesota | August 28 | WLB |
| Physical Education | October 10 | KSTP |
| University of Minnesota | 19 | WCCO |
| University of Minnesota | November 5 | WLB |
| Minnesota Public Health Association | 10 | KSTP |
| Minnesota Society for the Control of Cancer | December 14 | KSTP |
| 4-H Club | February 13 | WCCO |
| School of Agriculture | March 10 | WCCO |
| Minnesota Foundation | 29 | WCCO |
| Minnesota Hospital Association | April 12 | WMIN |
| Minnesota Hospital Association | 20 | WLOL |
| Minnesota Hospital Association | 21 | WLB |
| Minnesota Hospital Association | 26 | KSTP |
| Minnesota Hospital Association | May 11 | WLOL |
| Safety Council | June 22 | KSTP |

## SUMMARY

1. The regular weekly radio program sponsored by the Minnesota State Medical Association and given over WCCO by Dr. W. A. O'Brien is now in its 14th consecutive year.

This is the oldest and most popular sustaining program on any station in the Northwest and one of the oldest in the entire United States, and the appreciation of the membership should be conveyed again to Dr. O'Brien for his fine work and to Stations WCCO, WLB and KDAL for their coöperation in this program.

2. In addition to this regular broadcast, the committee this year arranged a series of radio interviews over Stations KSTP, WTCN and WMIN to initiate the state-wide campaign carried on by the association for vaccination and immunization. These programs were supplemented by interviews and announcements on several smaller stations throughout the state.

3. Two round-table discussion broadcasts were also arranged to coincide with the campaign for better nutrition. The latter were given over KSTP. The effectiveness of the entire effort was demonstrated by the surprising number of requests for literature and information that came as a response to the broadcasts. Further development of the round-table broadcast is contemplated as part of the public health education program of the association next year.

4. Station WLB, University of Minnesota, is to be commended for sponsoring Dr. O'Brien in the program for junior high school students. Physicians residing in cities with junior high schools should call this program to the attention of the school authorities.

ROBERT M. BURNS, *Chairman.*

DR. N. H. BAKER, Fergus Falls, Acting Chairman of Reference Committee on Lay Education: The Reference Committee to study Lay Education Reports considered the Public Health Education report and recommends it be accepted as submitted and reports it is apparent that the committee as it was reassigned is functioning satisfactorily.

The Editorial Committee Report was also considered as submitted and this committee commends the favorable press maintained.

The Radio Committee Report was considered as submitted and the Reference Committee feels that some expression of appreciation should be made to the people who contributed the radio time for these programs. A word of commendation should be given to Dr. O'Brien for his fine work. It is the feeling of the Committee also that the close coördination between the other various health agencies in the state which heretofore coöperated on this program should be maintained in the future. We recommend acceptance of these reports.

The motion to accept the reports was seconded and unanimously carried by the delegates.

At this point the presentation of reports was interrupted to hear Miss Nora Rolf, representing the Minnesota State Nurses Association.

MISS NORA ROLF: The Minnesota Nursing Council for War Service is a committee created by the Minnesota State Nurses Association and is organized for the purpose of coördinating the efforts of all groups interested in nursing. The membership includes physicians, hospital administrators, nurses, and laymen. The president of the Minnesota State Nurses Association is the chairman.

The organization of the Nurses Battalion of the Minnesota Defense Force is under the Military Division. Major Ruth Boynton is a member of the Nursing Council for War Service.

The objectives of the nursing councils, national, state and local, are: 1. To supply and distribute nursing service to military forces, civilian population and office of civilian defense. 2. To recruit qualified students for schools of nursing.

The responsibilities of the nursing profession might be compared with the four duties outlined by Vice-President Henry Wallace in a speech delivered in New York City recently: "The duty to produce to the limit, the duty to transport as rapidly as possible to the field of battle, the duty to fight with all that is in us, and the duty to build a Peace, just, charitable and enduring."

We nurses have duties to perform in this all-out war effort.

Federal funds for nursing education have assisted materially in this produce-to-the-limit duty. The sum of $1,850,000 was provided by the federal government for the training of nurses for the fiscal year 1941-1942 which ends June 30. One hundred and twelve schools of nursing in the United States were given assistance, six of which were in Minnesota. Federal funds are granted for three types of programs: 1. Basic professional programs in nursing schools connected the hospitals of at least 100 patients. 2. Refresher courses for inactive nurses. 3. Postgraduate courses in special and clinical fields offered by institutions which are already giving advanced courses.

Minnesota has had the benefit of all classifications. In addition, a program for recruiting and training nurses in public health for jobs in rural communities has been started by the Minnesota Department of Health, and allows stipends to trainees through U. S. Childrens' Bureau funds.

Recruiting of qualified students will be essential in order to fulfill our responsibilties, if nurses are released to the armed forces on the fighting fronts. The Army needs 6 nurses for every 1,000 enlisted men, and the Navy 3 for every 1,000.

The medium for providing nurses for the Army and the Navy is primarily through enrollment in Red Cross Nursing Service. Minnesota must enroll 825 nurses

in the First Reserve (that is under 40 and unmarried) before September 1 in order to attain the quota of 1,122.

Every nurse eligible for the First Reserve should be enrolled, regardless of the field of nursing in which she is employed. Plans for the assignments to the Corps Area Commanders are made by the National Red Cross Nursing Service Committee, which is a representative group of nurses from all of the various national nursing organizations.

So far, 211 Minnesota nurses have been assigned to military service, ninety from the Saint Paul committee, 181 from the Minneapolis committee, and forty from the Duluth Committee. One hundred and twenty nurses will be assigned to the General Base Hospital, seventy-one from Rochester.

Three nurses are in England with the Harvard Medical Unit.

Seventeen public health nurses have already left the state for war duties. Although this is a small number, it represents approximately 4 per cent of the total number of active public health nurses in the state.

Minnesota nurses have responded exceptionally well in the development of war nursing activities in practically every county in the state.

*In Red Cross Home Nursing.* Seven hundred eighty-eight nurses have attended institutes at which they received assistance in their teaching of Red Cross Home Nursing classes. One thousand fifteen have been authorized to teach, although only 925 certificates have been issued to women completing the course, before the end of this month, this number will be tremendously increased. The Minnesota quota for Red Cross Home Nursing certificates is 25,780.

*In Red Cross First Aid.* In many localities nurses have taken First Aid and Instructors' courses, and are assisting local physicians in this program.

The R. C. Volunteer Nurse Aide service in Minneapolis, and I believe in St. Paul and Duluth, are very popular. Before July 1 there will be 350 women in these three cities who will have completed their eighty hours of instruction and will volunteer their services in local city hospitals.

The hospital assistant program under the Office of Civilian Defense trains women to do many tasks which nurses have been doing, but which do not require professional education, i.e., receptionists, messengers, typists, and assistants in the care of the wards and rooms.

The National Youth Administration and the Works Progress Administration are also giving instruction to girls and women, so there are a number of plans for supplementing nursing service. However, there is a saturation point beyond which, for the safety of the patient, these nonprofessional workers cannot go.

An activity which is now in progress, is the following up of the National Inventory of Nurses made in 1941. We anticipate improved planning in the distribution of nursing service when we have a more accurate picture of the nurse supply in various counties. A Guide has been prepared by the National Nursing Council, and is available to communities. It will assist them in making plans for the distribution of nursing service.

The Minnesota Nursing Council for War Service, in its advisory capacity, has serious duties ahead. The success of the entire effort will depend upon the participation of all local communities in the war nursing activities. With foresight, planning and wisdom, we can deliver the necessary services and personnel.

The job must be done!

MISS LOUISE NEWCOMBE, president of the Minnesota State Board of Nursing Examiners: When war was declared, the nursing profession was no more ready for it than was the rest of the nation. Actually we had been hearing for sometime about a shortage of nurses for civilian needs, and occasionally it was said the shortage was due to the State Board of Nurses' Examiners having closed so many schools. This most emphatically was not true. Some of the real reasons for the nurse shortage are as follows (and all of this applies not only to Minnesota but to the nation):

During the depression years of 1929-36-37, unemployment amongst graduate nurses caused most hospitals to add many graduate general duty nurses to their staff and correspondingly reduce their student enrollment, so fewer nurses were graduated each year and because graduate nurses could be had for so little, many smaller hospitals closed their schools as it was cheaper to have an all graduate staff than to run a good school.

However, in a few years the economic pendulum swung again, work became more plentiful and a nurse shortage was spoken of.

Changes had been taking place throughout the country which used up the increased supply of nurses.

1. The new and attractive field of stewardess on airlines and passenger trains had taken up a good many nurses. These have been given up now for the duration I understand.
2. Marriages increased with improved economic conditions.
3. Passing of the Social Security Act in 1935 made possible a vast expansion in all forms of Public Health work and public health nurses increased by about 2,000.
4. Industrial nurses increased by about 1,000.
5. Hospitals were affected, too, in various ways.
   (a) Hospital service plans had greatly increased the extent to which the public used hospitals.
   (b) Having become accustomed to a large graduate staff, hospitals found it difficult to dispense with them.
   (c) In line with other branches of industry, hospitals had put in the 8 hour day and 48 hours week and this called for a good many more nurses.
   (d) The increase in specialization, and new and scientific treatments had increased the amount of nursing service rendered to patients.
   (e) Because some of the public has become so "claim conscious" hospitals have found it necessary to keep more extensive records.

The above and other similar duties have become quite time-consuming.

6. Then, too, wherever Defense Industries and war projects have sprung up they have added hitherto unknown problems and hazards.

This was our situation when we went into the war. Our men have now been sent to the four corners of the globe and, of course, our doctors and nurses follow our fighting forces.

Last year (1941) Minnesota nursing schools graduated 829 nurses and this year they expect to graduate 1,300. Minnesota has 29 accredited nursing schools and 3,021 students in those schools as at present. In the U. S. as a whole there are 1,300 accredited nursing schools with 900,000 students in those schools, the only state having no nursing school being Nevada.

Even that 900,000 is not enough. It must be increased to 100,000 this year and 110,000 in 1943. There is urgent need for more nurses and not just more nurses to release graduate nurses for military duty. When the war is over, American nurses in almost countless numbers will be needed to help with the tremendous job of reconstruction. Our National Government has urged that standards be not lowered during this emergency, either in type of students recruited or in content of course offered.

Hospitals are going to face many difficulties of supervision as their skilled workers leave for active service and their places are taken by younger less experienced workers.

The National Nursing Council for War Service suggests that hospitals do the following:

1. Offer Refresher Courses to older inactive nurses so they may replace those who have left.
2. Economize nursing time by simplifying nursing procedures.
3. Allocate nonnursing duties to nonprofessional workers. We may have to change our ideas as to what duties must be done by nurses and what nonprofessionals can be taught and allowed to do safely.
4. Hold their essential administrative and teaching staff by maintaining good service conditions for all employees as to reasonable workers' hours, salaries and wages, food and housing, etc.
5. Urge all nursing personnel to make it their own responsibility as a national defense measure to do everything possible to safeguard their own health and so avoid lost nursing time.
6. Last and most important—put on a far-reaching recruitment program for well qualified students. The greatest difficulty at present is the competition at high wages from defense industries and business firms for young women in this age group. To offset this, radio talks are being planned and speakers from the nursing groups are going to ask women's clubs and organizations, High Schools and Colleges to be allowed to present the urgent need for more nurses. The National Government has given nursing a high priority rating.

It has also been suggested that the medical professoin can render valuable help at this time by

1. Using private duty nurses on the basis of need rather than ability to pay, in other words "rationed" like sugar and tires.
2. Advocating group nursing in hospitals and hourly nursing in homes.
3. Using housekeeping aides in homes, where possible.
4. Economizing in the use of nursing time by careful scheduling of operations and reducing research work calling for nurses' time to that necessary for defense work.
5. Lastly, by trying to interest the right type of young women to take up nursing.

Our Board, as a board and individually through its members, is doing all it can to help in every way, trying to carry out the law with as liberal interpretation as possible and with understanding of present difficulties. Ours is the only accrediting agency for nurses, there is no other. We have moved our Fall examination usually held in November, forward to August in order to accelerate the registration of nurses—561 of whom are ready to write at that time. We may, for the first time, hold a third examination this year—in December.

It may be that some of our hospital schools now closed may wish to re-open and several such schools, if near together, might consider pooling their teaching resources and clinical services.

Our Board is always glad to give advice and assistance to any schools now in operation, or to any who may wish to re-open. As we have no Educational Director at present and the law does not provide remuneration or traveling expenses to Board Members for this work, any hospitals wishing our help would have to pay our traveling expenses and we would be glad to give our own time to this work.

In conclusion—there was never a time when all the allied professional groups—doctors, hospitals, nurses and Board of Examiners needed so much to work closely together. We believe we can rely on your cooperation in all the days that lie ahead and we do assure you of ours.

DR. F. J. SAVAGE, chairman of the Committee on Interprofessional Relations: No one could have listened to the reports of Miss Rolf and Miss Newcombe without being impressed with their scope and sincerity. Nothing needs to be added to Miss Newcombe's lucid explanation of the shortage of nursing. I believe she did not mention the fact that whereas there were some sixty-four accredited schools of nursing there are now only twenty-nine. Any school which has been closed and wishes to re-open will get all possible assistance as Miss Newcombe said, if it wishes to re-open.

It should be noted that certification by the State Board is necessary to admit any nurse to service with the Red Cross or the Armed Forces. Any hospital which feels it has a grievance against the Board for any reason, may, if it wishes, report the matter to me as chairman of the Interprofessional Relations Committee. A board has been established consisting of three nurses, three doctors and three hospital administrators to hear such grievances. It has not yet met but will function whenever there is a call for its services.

The Speaker thanked Miss Rolf and Miss Newcombe for their reports and then called for the report of the Reference Committee on Medical Economic reports, Dr. M. C. Piper of Rochester, chairman. The following reports were considered:

### EDITING AND PUBLISHING COMMITTEE

It again becomes my privilege to submit a report on the publication of MINNESOTA MEDICINE for the calendar year of 1941.

It may be recalled that at the outset of the year we expressed some anxiety concerning the journal during that year. We are happy to state, however, that MINNESOTA MEDICINE has continued to make a good showing financially in 1941, although we had to contend with considerable difficulty in maintaining advertising revenue.

The average number of copies printed during the year and the number of illustrations published per issue happened to be just the same as for the year 1940, the peak year in volume of printing for the journal. The net cash surplus for 1941 amounted to $1,318.67, which was remitted to the office of the State Medical Association. This remittance represents a substantial sum to the credit of MINNESOTA MEDICINE.

The total number of copies of the journal printed during 1941 was 40,000, an average of 3,333 copies for each of the twelve monthly issues. The total number of pages printed amounted to 1,264, including two 4-page inserts as a center spread in the April and September numbers respectively, on the account of the Center for Continuation Study at the University. Of the total number of pages printed, 936 were devoted to reading material and 328 to advertising. The reading pages include 125 scientific articles, an average of 10½ such papers per issue; 22 case reports, 9 of these 22 reports appearing under the heading "Clinical-Pathological Conference," and 2 abstracts of papers published as part of the Proceedings of the Minnesota Academy of Medicine. There were 191 illustrations published, or an average of approximately 16 illustrations for each issue.

The special section devoted to Medical History filled a total of 79 pages, or an average of 6½ pages per issue; that for Medical Economics, including the special page on Industrial Health, filled 70 pages or approximately 6 pages for each issue. The page on Industrial Health was introduced in the August number, and is being published under the supervision of the State Committee on Industrial Health. Another new section added in 1941 is that of the Clinical-Pathological Conference, which made its initial appearance in the issue for April, 1941. Here appear discussions of interesting cases by members of the Minneapolis General Hospital Staff under the direction of Dr. Frank Andrus.

Other special sections include Editorial, Reports and Announcements of Societies, News Items, Book Reviews, the Yearly Roster of Members, and Minutes of the Annual Meeting of the State Medical Association. The section on news items continues to occupy a large portion of the journal due to the extra effort which is being made to gather material of this kind through all possible sources.

Subscription records for 1941 show a total number of paid member subscriptions of 2,614, with about 57 subscriptions carried the first part of the year as delinquent; paid nonmember subscriptions amounted to 168, with 52 delinquent. The total number of subscriptions is 2,891, plus miscellaneous copies to advertisers, advertising agencies, complimentary, exchange and single copy sales of 411. Surplus copies on hand for filling orders for back copies, sample copies to prospective subscribers and advertisers, average about 100 monthly.

As a concession to conditions and at the request of the Cooperative Medical Advertising Bureau, an affiliate of the American Medical Association, the Editing and Publishing Committee approved of placing some of the advertising in the back of the book opposite reading material. This is now the policy of practically all state medical journals, as well as privately owned journals. No advertising is ever placed opposite any of the scientific papers.

The country is now at war, and it is of course impossible to even estimate what the effect of the war will be upon business. Conditions are bad and they are definitely growing worse as time goes on. More and more restrictions are being placed upon business concerns, and this is having its effect upon advertising volume. How severe these conditions will become before they become better only time can tell.

It is encouraging, though, that advertising volume so far for

the first five issues of the year compares favorably with the corresponding period for 1941. There are indications that medical manufacturers will not be as seriously affected as other industries. We are hoping that in the curtailment of advertising in the large consumer mediums, there is the possibility, although remote, of an increase in such class publications as medical journals. It is realized that this may be wishful thinking, but there is no definite evidence at this time of any loss in advertising volume. This, however, should be regarded only as a statement of conditions which have prevailed during the first five months of the year. They may be entirely different during the other seven months.

E. M. HAMMES, M.D., *Chairman.*

## MINNESOTA MEDICINE
## CASH RECEIPTS AND DISBURSEMENTS

**January 1, 1941, through December 31, 1941**

| | | |
|---|---|---|
| SOURCE OF CASH RECEIPTS | | |
| Display Advertising (Includes $615.30 AMA Dividend) | $10,399.54 | |
| Member Subscriptions | 5,070.00 | |
| Non-member Subscriptions | 614.85 | |
| Illustrations | 61.49 | |
| Miscellaneous Income | 37.22 | |
| Reprint Income | 142.57 | |
| Gross Cash Receipts | $16,325.67 | |
| Less: | | |
| Discounts and Commissions | | |
| Advertising | $1,412.77 | |
| Subscriptions | 15.75 | |
| | 1,428.52 | |
| Net Cash Receipts | | $14,897.15 |
| CASH DISBURSEMENTS | | |
| Journal Expense | | $13,578.48 |
| Cash Surplus for Period | | $ 1,318.67 |
| Accounts Receivable January 1, 1941 | | $774.28 |
| Accounts Receivable December 31, 1941 | | $909.03 |

## STATEMENT OF INCOME AND EXPENSE AND PROFIT AND LOSS

**For the Period January 1, 1941, through December 31, 1941**

ACCRUAL BASIS

| | | |
|---|---|---|
| INCOME | | |
| Display Advertising (Includes $615.30 AMA Dividend) | $10,527.67 | |
| Member Subscriptions | 5,070.00 | |
| Nonmember Subscriptions | 614.85 | |
| Illustrations | 61.49 | |
| Miscellaneous Income | 44.43 | |
| Reprint Income | 146.78 | |
| | 16,465.22 | |
| Less: | | |
| Bad Accounts Charged Off (See Schedule A) | 4.80 | |
| | | $16,460.42 |
| EXPENSE | | |
| Journal Expense (See Schedule B) | 13,578.48 | |
| Discount and Commissions | | |
| Advertising | 1,412.77 | |
| Subscriptions | 15.75 | |
| | | $15,007.00 |
| Profit for Period | | $ 1,453.42 |

### SCHEDULE A

BAD ACCOUNTS CHARGED OFF

| | |
|---|---|
| Mabel Hanson | $1.10 |
| Dr. Geo. W. Holt | 2.70 |
| Blanche Bakke | 1.00 |
| | $4.80 |

### SCHEDULE B

JOURNAL EXPENSE

| | |
|---|---|
| Printing Expense (Includes composition, presswork and bindery expense | $ 6,286.17 |
| Paper Stock | 1,695.64 |
| Illustrations | 730.20 |
| Dr. Carl B. Drake—Editorial Fee | 1,200.00 |
| Second Class Postage and Postage Used on Minneapolis and Foreign Copies | 442.10 |
| Mailing Envelopes (Used for sending out advertiser's copies) | 20.25 |
| Bruce Publishing Company Service Fee (Covers business management, stenographic service, mechanical editing of all material, ordering all cuts, making up dummy, mailing out all proofs, bookkeeping, billing and collecting all accounts, keeping up mailing list, etc.) | 1,680.00 |
| Bruce Publishing Company (Covers telephone, telegrams, addressograph plates, etc.) | 132.00 |
| Advertising Commission (Includes 5% received from advertising placed through CMAB) | 1,304.54 |
| 1941 Copyright Fee | 24.00 |
| Insurance Bond—J. R. Bruce, Bus. Mgr. | 5.00 |
| Exchange on Checks | 7.88 |
| Stationery | 50.70 |
| | $13,578.48 |

## INDUSTRIAL AND CONTRACT PRACTICE COMMITTEE

No ethical infractions in connection with industrial or contract practice have been reported to the committee this year. In one or two instances contract arrangements are being closely watched, but there is nothing of a definite nature to report concerning them at this time.

F. A. OLSON, M.D., *Chairman.*

## MEDICAL ADVISORY COMMITTEE

No unusual problems requiring a meeting of the entire committee have arisen during the past year.

The chairman has continued to receive reports of malpractice cases, threatened or actually started, and has studied them all carefully. In numerous instances he has given advice to the Insurer regarding special aspects of individual cases. At the request of the Insurer, also, he has reviewed material submitted and given an opinion as to the best manner of handling the case.

The number of cases submitted to the committee has shown a slight decline during the last year. There may have been other cases, of course, which have not been referred to the committee but the fact that our rate appears to be declining in comparison with last year may be safely taken to indicate that the general rate of malpractice suits is going down. This we regard as a healthy indication.

W. H. HENGSTLER, M.D., *Chairman.*

## COMMITTEE ON MEDICAL ECONOMICS

The Committee on Medical Economics functions mainly through its extensive organization of sub-committees. Its work has been reported in detail through the respective chairmen of these committees and will not be repeated here.

In general it should be pointed out, however, that the war has substantially and inevitably altered the social and economic aspects of medical practice. The immediate problems of this committee, as of all other committees of the association, have been concerned during the past year, first, with the provision of medical services to the armed forces and, second, with the essential adjustments which must be made to meet the wartime medical needs of the civilian population.

Interest in new plans for the distribution of medical services, such as medical insurance plans and the extension of hospital insurance plans, continues to be active in many quarters within and without the medical profession, however, and the danger still exists that wartime exigencies may be used to promote hasty and ill-advised measures which, in tthe long run, will unnecessarily endanger scientific progress.

For that reason, in spite of emergency needs of the moment, physicians must examine every proposal carefully in the light, not only of the immediate need, but of the long-range effect upon medicine and the public welfare.

The section devoted to Medical Economics which appears each month in MINNESOTA MEDICINE is under direct supervision of the chairman and members of the executive sub-committee. Its aim has been to keep members informed specifically upon immediate war problems of medicine and upon progress elsewhere with medical insurance and other experiments in distribution of services, upon trends in legislative action in Washington and upon association policies as reflected in meetings of the Council Delegates and committees of the association.

Suggestions and contributions of officers and members will be welcomed by editors and members of this committee.

GEORGE EARL, M.D., *Chairman.*

## SUB-COMMITTEE ON MEDICAL ETHICS OF THE COMMITTEE ON MEDICAL ECONOMICS

The Sub-Committee on Medical Ethics of the Committee on Medical Economics of the State Association has not had any question brought before it concerning the ethics of any individual medical practitioner in the State of Minnesota and therefore there is no formal committee report.

ROBERT D. MUSSEY, M.D., *Chairman.*

## COMMITTEE ON LOW INCOME AND INDIGENT PROBLEMS

Several conferences have been held during the past year with officials of the Farm Security Administration. As a result of repeated requests by FSA authorities, the Farm Security plan for prepaid medical service is now being tried experimentally, with Council approval, in Ottertail and Morrison counties. The experiment began only a few months ago and while, so far, it seems to be working out fairly well, not enough time has elapsed as yet to evaluate the results.

Application by FSA officials to introduce the plan in Carlton county, also, was considered carefully and rejected by Carlton county doctors.

Permission has been granted by the committee and the Council for similar experiments in a few more counties. So far, however, no action on the matter appears to have been taken either by physicians in the counties concerned or by the FSA.

The whole question narrows down, therefore, to success or failure in Ottertail and Morrison counties. At least a year should elapse before any conclusions in the matter are attempted.

W. A. COVENTRY, M.D., *Chairman.*

## COMMITTEE ON SICKNESS INSURANCE

The Committee on Sickness Insurance begs to report the activities of the Committee during the past year.

Representatives of the Minnesota State Medical Association attended the Conference on Medical Service Plans, which was held in Chicago, Illinois, on February 14, 1942, and herewith submit a summary of the discussions that were had at that meeting.

### Conference on Medical Service Plans
### February 14, 1942, Chicago, Illinois

There are four types of medical service plans:

1. Cash indemnification. There are two types under this group; (a) insurance company plan; (b) employer-employee groups. Less than 6% population in U. S. A. have sick accident insurance.

2. Group clinic or consumer clinic type; 30 such plans in the U. S.—150,000 persons covered. Example: Ross-Loos Plan, Los Angeles—Group Health Association.

3. Voluntary prepaid medical service plans. These plans are sponsored by medical societies; 25 such plans in U. S., 750,000 persons covered.

Reason for conference: to coördinate these plans.

4. Compulsory medical service. Least desirable of all plans. Medical service is a personal relation and should be maintained as such; the welfare of the patient is the primary consideration. The financial aspect should be subordinate. Contract practice restricts choice of physician. Study has been made of 335 plans. A voluntary plan need not lead to a compulsory plan.

At the meeting various types of medical service plans were discussed. (Details of the plans are deleted for brevity's sake. —EDITOR.)

There is no likelihood of a uniform plan throughout the United States. Material on various plans was assembled for a meeting of the American Medical Association held in Atlantic City in June. A committee was appointed to meet with the Board of Trustees of the AMA to consider permanent organization of prepaid medical service plans. Motion was passed to also appoint a committee to meet with a like committee from the Hospital Service plans.

Following the Conference in Chicago, the Committee on Sickness Insurance met and decided to make surveys along three lines of investigation as follows:

1. A sub-committee, composed of Dr. O. I. Sohlberg, St. Paul, chairman, Dr. F. R. Hirschfield, Minneapolis, Dr. O. W. Holcomb, St. Paul, was asked to consider prepayment service plans that might be workable for urban groups.

2. A sub-committee, composed of Dr. W. W. Will, Bertha, chairman, Dr. J. L. Mills, Winnebago, Dr. E. W. Johnson, Bemidji, was asked to investigate plans that might be workable for rural groups.

3. Further, it is the consensus of opinion that if any sort of a state-wide prepayment medical service plan or plans were to be instituted, it would be necessary to prepare an Enabling Act which would be submitted to our legislature and a sub-committee of the following was appointed to carry on this investigation: Dr. C. A. McKinlay, Minneapolis, chairman, Dr. V. P. Hauser, St. Paul, and Dr. R. R. Cranmer, Minneapolis.

As these subcommittees continued to carry on their work, a meeting of members from various states where prepayment plans have been instituted was held in Atlantic City on June 10, 1942, at the American Medical Association Meeting, at which time reports were made concerning the difficulties and the success and failure that had been met with in their respective plans. (The report of various plans in detail is omitted for brevity's sake.—EDITOR.)

In general it can be stated that the physician is the most difficult one to sell and educate on the plan. Rates have generally been too low. No plan has been in operation long enough to have reliable statistical data. States must have special laws enacted unless operated as insurance company. All plans are under the jurisdiction of the insurance department of each state. The Committee strongly favors gathering of data by the Bureau of Medical Economics of the AMA and meeting once each year in Chicago either in November at the Secretary's meeting or in February at the Medical Conference.

The Committee on Sickness Insurance then met to review the activities of the various subcommittees.

Dr. Sohlberg submitted a report which is as follows:

This is the report of your sub-committee on urban plans for prepayment medical care. There does not exist enough experience to warrant a full report from an actuarial point of view.

The best experience is in Toronto, Canada, where a highly successful plan is working. This plan is successful because of the hard work and the genius of Dr. Jason Hannah. He is firmly of the opinion that any plan not sponsored and controlled by the medical profession will ultimately be run with money as a criterion and not service.

The Toronto plan takes in hospital care, nursing, medicine and medical care. It began in 1937 and has grown from 750 to over 30,000 subscribers. People must buy it; it is not solicited. The cost is $2.50 per month with additional charges for dependents. It is watched closely by Dr. Hannah. He states that about 88 per cent of the medical profession are very much for the plan, about 7 per cent accept it and about 5 per cent oppose it. It has paid well. They have bought a complete filing system and have accumulated a surplus of over $50,000.00. This plan deserves further study and could well be used as a model.

There is a very good plan functioning well in Wichita, Kansas. This, however, is a postpayment plan sponsored by the local medical society and financed by the Community Chest. Such a plan deserves further study and may be as good a solution as the prepayment plan. At least it is working satisfactorily there.

The medical society asked the Community Chest to pay for the social investigations and they agreed to do so. People needing medical care and who express concern over the cost are referred to the Social Service, who investigate and report. They may suggest full payment, part payment (and what part) or free service, or they may suggest deferred payment. The medical profession as a whole endorses it, work with it and is satisfied. The public is well pleased. This plan is little publicized. Possibly this is the best plan for a city unless a full time medically trained executive is prepared to take over as Dr. Hannah has in Toronto.

Other plans are surgical only (Michigan) or limited in some other way.

In the Twin Cities we are looking with benevolent neutrality at a plan proposed by a Credit Union of the employees of Ramsey County, "Group Health Mutual, Inc." It is very limited as yet but they show the proper spirit of service and it allows a free choice of physician. It costs 90 cents a month. It, however, is an experiment and should be interesting to watch.

These are in our opinion the three best examples for us to watch and follow if we see fit.

OLOF I. SOHLBERG, M.D., *Chairman.*

Dr. Will reports that his subcommittee had difficulty in preparing a report in view of the fact that rural communities have not as yet developed successful plans for conducting a prepayment medical service plan and therefore has no specific suggestions to make at this time.

Dr. McKinlay's subcommittee which was to investigate the Enabling Acts found that they did not have adequate reports on Enabling Acts and therefore postponed making any recommendation until the report from the recent meeting in Atlantic City was submitted. He further reports that the program is too large to arrive at a hasty decision but his subcommittee is willing to continue its efforts in conducting a survey in collecting the material for subsequent meetings.

At the conclusion of this meeting the following resolution was suggested:

The Committee as a whole with the aid of our attorney, the executive secretary and secretary, have made many investigations and in view of the fact that there has been a great deal of study of prepayment and postpayment medical service plans, and inasmuch as the medical service plans in operation are still in their experimental state, your Committee on Sickness Insurance believes that we are not prepared to make definite suggestions concerning the development of a state-wide prepayment or postpayment medical service plan at this time.

The Committee is most willing to supply the data accumulated and to advise those local groups within the state who might be interested in experimenting with and developing prepayment or postpayment medical service plans.

The Committee recommends further study along these lines and to that end recommends:

1. That copies be obtained of all the Enabling Acts enacted in the various states.
2. Copies be obtained of the contracts now used in those medical service plans which are in operation.
3. That definite information be obtained as to the service charges to the contract holders.
4. That information be obtained with respect to the professional fees paid for the various services under such contracts.
5. That all information in the way of suggestions and criticism of the various plans now in operation be obtained from time to time.

The Committee further recommends that the Minnesota State Medical Association sends representatives to and participates in the Annual Conference of Medical Service Plan Representatives.

A. W. ADSON, M.D., *Chairman*

DR. M. C. PIPER, Rochester, Chairman of Reference Committee on Medical Economics reports:

*Editing and Publishing Committee.*—This is a very enlightening report and both the committee and the publishers should be complimented on the successful year. The reference committee feels that it has maintained its standard of excellence.

The item of future revenue and cost was carefully discussed with reference to the possible decrease of revenue from advertising and increased cost of publishing. It was felt that possibly the earnings of the past year might be kept as a definite reserve fund to meet possible future deficits.

It is assumed that the Editing and Publishing Com-

mittee has a definite plan of curtailing expenses, if necessary, due to a reduction in advertising revenue.

The reference committee recommends the adoption of this report.

*Industrial and Contract Practice Committee.*—The reference committee recommends adoption of the report of the Industrial and Contract Practice Committee, and feels that this is an essential, and its activities should be continued.

*Medical Advisory Committee.*—The reference committee feels that this report should be adopted, but with the general recommendation that more specific data as to the reduction in malpractice suits as compared with previous years and their method of solution might have been more enlightening to the House of Delegates.

*Committee on Medical Economics.*—The reference committee recommends adoption of this report.

*Subcommittee on Medical Ethics of the Committee on Medical Economics.*—The reference committee recommends adoption of this report, but feels possibly that the House of Delegates would like to be enlightened as to the specific functions of the Medical Ethics Sub-Committee of Medical Economics.

*Committee on Low Income and Indigent Problems.*—The reference committee recommends the adoption of this report.

*Committee on Sickness Insurance.*—The reference committee recommends adoption of this report on sickness insurance, and wishes to compliment the committee on their activities and the excellence of the report which they have submitted, and recommends to the House of Delegates the adoption of the five proposals made in the committee report. The reference committee would like to suggest that a copy of this report be placed in the hands of the secretary of all component societies, to be read by such component societies and to be kept as a record of reference.

DR. GEORGE EARL, Saint Paul, chairman of the committee on Medical Economics: The work of the Medical Economics committee is done by its various subdivisions and their excellent chairmen whom you will undoubtedly hear later. Responsibility for one phase of the work lies with the chairman and the editorial subcommittee. That is the section on Medical Economics in MINNESOTA MEDICINE. Here we try to give information on economics and the war, on legislation in Washington, sickness insurance, medical care for low income and indigent groups and other related subjects. I want to thank Mr. Rosell, who checks over this material, and Mrs. Fitzgerald, who edits the material, for their assistance in this work.

DR. A. W. ADSON, Rochester, chairman of the Committee on Sickness Insurance: The problem of prepayment and postpayment plans for handling costs of medical service are among the most vital before the medical profession today. You will see in the report of the committee that there has been a great deal of experimental activity all over the country and two conferences in Chicago and in Atlantic City which Mr. Brist and I attended. You will find Mr. Brist's notes on experiences reported elsewhere at these meetings in the report. You will note, also, the findings of our subcommittees on urban and rural plans from Dr. Sohlberg and Dr. Will and on enabling acts from Dr. McKinlay, in the report. Also the recommendations from the committee which, in view of the confused and inconclusive state at this time, suggest further study. You will be interested perhaps in the proposals which Group Health, a coöperative organization of credit unions with offices in St. Paul presented to the committee. The first plan of this organization was not approved because it did not provide free choice of physician. But it is understood that a policy is being developed which corrects that fault.

As a whole we have come to the conclusion that the demand for sickness insurance comes chiefly from people who have failed to realize the difficulties involved. Also though we are willing to supply data to local groups within the state who may be interested in experimenting with prepaid plans, we are convinced that organization of a state-wide plan is a tremendous undertaking. We do not feel that we are in a position yet to state whether it might be a good thing or not, but we are attempting to learn everything possible from those who are trying it elsewhere.

DR. GEORGE EARL, chairman of the Committee on Medical Economics: Even in Michigan where they started with complete medical service, they have largely restricted their service to surgical benefits only. They were bankrupting themselves under the original plan. Obviously we are not ready yet, on the basis of experience elsewhere, to recommend a state-wide plan here; but we must make it clear to our members that our delay in taking action in Minnesota is not due to neglect nor failure of this committee to function.

DR. ADSON: It appears from Michigan's experience that limited surgical and obstetrical service may be more practical than complete service. It might be noted, also, that one of the chief problems that confronts all such undertakings as this is the problem of selling. The people don't just come and ask for the service and neither do the doctors accept it wholeheartedly. A great deal of missionary work is required to make it a going concern. There is also the problem of finding an administrator, preferably a doctor, who will be willing to give up his practice to develop the organization. In dealing with this entire matter the committee has been very careful, furthermore, not to say or do anything that might lay the medical profession in Minnesota open to charges of monopoly or of attempting to obstruct the development of the movement toward new plans for covering cost of medical service.

It was brought out in discussion between Dr. Adson, Dr. Earl and Mr. Rosell that the Michigan State Medical Society had appropriated a total of $50,000 to set the Michigan plan in motion and that there is now a deficit of $60,000, after two years operation, and that the Massachusetts State Medical Society has already appropriated $20,000 to the development of a plan which is not yet in operation.

At Dr. Adson's request, the Speaker then called on Dr. Gunderson of Wisconsin:

DR. GUNDERSON: Among many objections to sickness insurance as so far developed is the fact that, like all other insurance, it must be on an actuarial basis and must be controlled by experts who know insurance. In Michigan that meant that the plan must be controlled by laymen since no physician was available who was an expert in the insurance field. That is a very serious objection. Furthermore, sickness insurance has to be put at a very low premium to make it attractive enough to sell, too low to pay for proper medical service. The best service cannot be given for the premium charged and so you foster two standards of medicine, one for subscribers to insurance, and one for private noninsurance patients, a very dangerous condition in medicine. If your committee can suggest solutions to these two problems it will deserve great credit.

In response to questions from the floor about the California plan, Dr. Adson said that there is a state-

wide plan there and that it is encountering much the same difficulties as Michigan.

DR. EARL: A group of men who are running both the San Francisco and the California plans talked to me at Atlantic City about their troubles. They had difficulties, for instance, where a group of three doctors were practicing in the same building and were obliged to parcel off patients between them, the internist having one patient for a while, then the eye, ear, nose and throat man, then the surgeon.

DR. SEIFERT: There is disagreement as to fees and as to what bills should be honored and what not honored. Also they have not been able to pay anywhere near the fees stipulated, but have had to settle for a percentage and sometimes a small percentage.

The Speaker then asked for the report from the State Board of Medical Examiners by Dr. J. F. Du Bois, secretary, which was confidential and therefore not recorded.

A Resolutions Committee composed of Dr. R. W. Morse of Minneapolis, Dr. M. J. McMahon of Green Isle and Dr. Clarence Jacobson of Chisholm was then appointed by the Speaker and delegates were asked to submit resolutions to this committee. The House adjourned until 7:30 p. m.

## Sunday Evening Session

The Speaker called upon Dr. T. H. Sweetser of Minneapolis to discuss the report of the Committee on State Health Relations adopted at the afternoon session.

DR. SWEETSER: Members of the Committee on State Health Relations will be on hand in the booth reserved for us in the exhibit to discuss the matter of the proposed reform in our coroner system. I hope all of you will come to see us and inform yourselves of the proposal which, as you now know, calls for setting up a State Medical Examiner's office with a travelling pathologist and toxicologist for the state so that legislators can be informed in advance when we go to them with the plan next winter. We found that it will not be possible or advisable to attempt to upset the county coroner system now in existence, but we are sure that the plan outlined will afford a great improvement over the present situation. We may have difficulty now securing qualified men for the office, but we hope to have the setup ready so that we won't have to go back to the present unsatisfactory condition when the war is over. Information will be published on the matter from time to time in MINNESOTA MEDICINE. We hope you will watch for it and discuss it with your legislators.

The Speaker then called upon R. R. Rosell, executive secretary, to discuss the report of the Committee on Low Income and Indigent problems in the absence of Dr. W. A. Coventry of Duluth, chairman of the committee, at another meeting.

MR. ROSELL: The Farm Security group of the Social Security Division came into the state two years ago and secured permission of the Council to experiment with their plan for prepaid medical service to Farm Security clients in two counties, Ottertail and Morrison. After six months' operation in these counties they asked also for permission to go into Carlton and Beltrami counties for similar experiments. The Council approved, pending approval of local physicians in the counties. But the local doctors felt that the plan was not needed and rejected the proposal. Later experiments in Aitkin and Mille Lacs county were approved and doctors there are studying the matter to see if extensions shall be made to those two counties. To date no action has been taken. The plan will have been in operation one year on September 1 in Ottertail and Morrison counties, but no conclusive figures are available as yet as to the success of the work.

The Speaker then called on Dr. A. J. Chesley, secretary and executive officer of the Minnesota Department of Health. Dr. Chesley's address was of a confidential nature and was not recorded.

The Speaker next called upon Dr. W. F. Braasch of Rochester to report on the work of the National Physicians' Committee.

DR. BRAASCH: The National Physicians' Committee got off to a rather slow start for two reasons. First because difficulties of organization were great and, though we were really a stepchild of the American Medical Association, we were not given the official stamp of approval. Reasons for this failure are now largely overcome, and I am happy to say, since the last meeting of the House of Delegates at Atlantic City, we are now a legitimate offspring and have the green light to go ahead. The second is that we were originally organized through a central committee which actually operated to limit our progress somewhat. Now that is being corrected and we are organizing by states and large communities and are cementing a truly nationwide organization. It must be remembered that propaganda costs a tremendous amount of money and we cannot fight our battles without money. Thus we must not only ask for money once; we must ask for it continually. We have accomplished a great deal with the limited funds available so far but we need much more. You are all familiar with the pamphlets and advertisements that have already been distributed. They have had a surprisingly widespread effect on public opinion. This year we propose to provide 1200 newspapers throughout the country with weekly editorials, and we have embarked also on a program of radio broadcasts. Successful propaganda calls for constant repitition of facts by every possible medium. Beginning this fall our program will increase in volume and activity because it is more than ever necessary to acquaint the public with what medicine in America stands for. There is evidence on every hand that unless a determined stand is made now the independence of medicine in America will be a thing of the past and we shall be controlled by outside forces. The future of medicine, from a scientific as well as economic point of view, depends upon our efforts alone. Unless we hang together on this issue we shall certainly suffer separately. I hope you will bring this message to your members at home and help in every possible way to carry on this work.

DR. F. J. SAVAGE, Saint Paul, chairman of the Minnesota Division of the National Physicians' Committee: Our state-wide committee was the first completely organized committee within the National committee and we had the distinction, last year, of leading all other states in the Union in contributions. I would like to correct the number given by Dr. Braasch of newspapers receiving the NPC editorials. It is, I believe, 12,800, not 1200, and I am sure those editorials, thousands of which are used weekly, as clippings at headquarters show, are having a tremendous effect. Results may be a little bit intangible, but I have it on good authority that President Roosevelt's declaration supporting private practice and the right of the patient to choose his physician, made a few years ago at the dedication of a hospital in Maryland, was directly due to activity of the committee. Soon you will be receiving another letter from Dr. Braasch and myself about the needs of the committee and I hope you will respond as well as you did last year.

The Speaker then called upon Dr. H. Z. Giffin of Rochester, president of the Minnesota State Medical Association, to give his presidential address. (Dr. Gif-

fin's address was printed in the July issue of MINNESOTA MEDICINE.)

The Speaker now called upon Major C. A. Wood of the Medical Officers' Recruiting Board in Saint Paul.

MAJOR WOOD: Before December 7 and the outbreak of war, the Procurement and Assignment Service was set up at the request of the American Medical Association so that, in case war came, the handling of wartime medical service would be kept entirely in the hands of the physicians without government interference. The object was to avoid any wartime dangers of state medicine. The government concurred and the classification of physicians began with a view to determining community needs, and the men who could be spared to enter the armed forces. Committees were set up in each state and, in the meantime, questionnaires were sent to all from the national headquarters of the Procurement Service to provide a complete and up-to-date file on the professional personnel of the country. The majority of the physicians filled out and sent in their questionnaires in good faith. But then came December 7. We got into the war and the emergency became acute. Physicians were needed immediately but they did not respond in sufficient numbers. They have not responded up to the present time. Minnesota has done as well or better perhaps than the average in enlistments—there are, I believe, some 400 Minnesota men in the various branches of the armed forces—but that number is not enough.

The Medical Recruiting Board was set up to get more physicians and to get them quickly because two or three months are required to get a commission through the Surgeon General in Washington and time is short. The Recruiting Boards were directed to facilitate induction and cut that time to a minimum. The purpose is to get all who have been classified as available by the state Procurement Committee to come in to Saint Paul at once and apply for Commissions. We need approximately 400 more in Minnesota by the first of January. Here is our procedure. The first thing we do when a man comes in is to find out if he is available. We get that record from the Minnesota State Medical Association office next door. If he is available, application blanks are typed by the staff. That takes about half an hour and then the man is sent out to Fort Snelling for his physical which takes about three or four hours. Then he goes home and when we get his papers back from Fort Snelling (usually in three or four days) the man is notified. If he is physically qualified he comes in, is sworn in and given a month's deferment to close his business affairs. His papers are sent to the Surgeon General together with the date when he will be available and he is notified from Washington where he is to go and when. Notification from Washington sometimes is delayed a few days beyond the month set, but he is actually in the Army within a week after he applies for a commission.

The Recruiting Board commissions dentists only up to and including thirty-six years. We can give physicians to thirty-six commissions of first lieutenant and, from thirty-seven to forty-four, commissions of captain. For higher commissions applications must be made to the Surgeon General. All this is, of course, on a purely voluntary basis. But the draft may catch up with the man in A-1 who delays too long. Then he is liable to service as a buck private. From ages forty-five to fifty-four we can take applications and make examinations but applications must go to the Surgeon General for approval. Of course, the Army needs young men chiefly and only a small number of these can be majors or lieutenant colonels. A few men with special qualifications can attain those grades but many majors and colonels have already been called in from the reserve and the Army is not interested in many more in those grades.

We have sent out some letters to men who are classified available and so has the Procurement and Assignment committee. As a result, since last May, we have had ninety-three applications from physicians of whom only thirty-three have been sworn in to date. Many came in with physical disabilities but were sent for examinations so that they could be turned down officially. One physician from New York was sworn in as a private last week after his New York draft board ordered the Minnesota board to have him inducted. When the order came he tried to apply for a commission, but it was too late. I mentioned that case in my letter and a lot of men resented it very much. But the fact is that the Army can get its medical men and surgeons for a private's pay of $50.00 a month if it wishes—and if the physicians wait for the draft. For the present they are offering commissions but there is no regulation on that and the policy may be changed.

These are some of the reasons given by the younger men who are still staying out. There has been a misunderstanding about Procurement and Assignment. Many thought it was a kind of draft and that they could sit tight until they were summoned by Procurement and Assignment. But the Procurement and Assignment Service has no authority to summon men. Some thought the letter sent should be more personal. Others appear to believe the war will be over in a few months. If anybody can cite any good news that has come out of the war since Pearl Harbor outside of Coral Sea and Midway I don't know what it is. Many others want a higher rank or they want to be assured that they will be able to do some special type of service such as opthalmology. Many have criticized Procurement and Assignment. They say they have not been informed if they are available. There may be some justice in that. In any case, three or four times as many physicians volunteered in the first six months of the last war than have volunteered this time. Col. Hullsiek of the Selective Service has told me that the draft boards do not want to draft physicians into the ranks if they can help it. But the war must go on and physicians will have to be secured in some fashion. I, myself, was in private practice before I went on active duty and I am going to have to try to make a living again when this is over. But I want the privilege of going out and digging for it where and how I please without dictation from the government. The only way to avoid that, as I see it, is for all of us to help make this Procurement and Assignment plan work. It was started at the request of the American Medical Association, and it is up to us to see it through.

LIEUT. COMMANDER MILLER, U. S. Navy: The office for Officer Procurement for the Navy opened about a month ago at 706 Roanoke Building, Minneapolis. We are receiving applications there for junior and senior lieutenants and lieutenant-commanders from physicians up to fifty years of age, though we prefer men of the age group to qualify as junior and senior lieutenants. It takes about six weeks in Washington and one week here to get cleared for commissions in the Navy and we shall be glad to interview and give physical examinations to any who wish to come in. So far the Navy has been more fortunate than the Army and its needs have been supplied from those who come in. Applications for the Navy Air Corps are handled through the same channels. For the Air Corps, applications must be made for commission. After that a request is made to be sent to Pensacola for flight training. Most flight surgeons will go on aviation recruiting service, however, and only a few will actually serve as flight surgeons with the aviation corps.

DR. W. F. BRAASCH, chairman of the State Committee on Procurement and Assignment: Our state committee on Procurement and Assignment, as you know, represents all sections of the state. Dr. Collins is representative from this section; Dr. Gosslee of Moorhead represents the Northwest; Dr. Thabes of Brainerd, the North Central; Dr. MacDonald represents Minneapolis;

Dr. Dougherty, Saint Paul; Dr. Hunt of Fairmont, the Southwest, and I represent the Southeast. In addition, we have committees in each county in the state. All of our decisions are strictly impersonal and impartial and they are not the decisions of any one man.

There seems to be confusion as to the duties of the Procurement and Assignment Committee. As Major Wood has told you, the committee cannot force a man into the service nor tell him he must apply. The committee may call attention to the need but it functions only to classify men as to their availability on the basis of community need. If a man is essential to his community or to industry or to education or war research, we classify him as unavailable. If he can be spared from his community and is not engaged in these special services then he is classified as available. It is apparent, as Major Wood has said, that a number of men have understood that they should await orders from the Procurement and Assignment Committee before applying. But the PAS cannot give orders. It can and does classify as to availability and its decision in that matter is accepted by the draft boards. We have nothing whatever to do with a man's rating with his draft board, nor with the commission which he may be given. PAS has been handicapped because the national PAS was slow to get into action. Delays were due to lack of funds and inability to get procurement issue blanks printed. The Recruiting Boards were set up because the need was urgent and the Surgeon General had to have immediate action. Major Wood has coöperated fully with our state committee and the State Office.

We were interested in the reaction to McNutt's speech at Atlantic City. If you have read it, you will agree, I'm sure, that the situation demanded something of the sort though the manner might have been more delicate. We do not hear quoted those other remarks in which he reiterated that, so far as he is concerned, there will be no attempt after the war is over to socialize medicine, that he will do everything in his power to maintain free enterprise in American medicine.

The point is that we must raise more than 400 men between now and January 1 and there has been a tendency for some reason or other and particularly in the larger communities, to hang back and wait for the younger fellow to go in. I believe that tendency will change now that misunderstandings will be removed by this session. Rest assured that this committee will do all in its power to see that no community suffers for lack of medical service.

Discussion from the floor revealed the fact that many were under the impression that Procurement and Assignment would notify them individually when their services were required and that, having indicated their willingness on PAS questionnaires to serve, they were required to do nothing further until they received such notice. It was revealed that they had been told officially in some instances by representatives of the national PAS that they "should sit tight" until they received such notification. It was explained, in the course of discussion, that the first letters sent out by the state committee were directed to men in the lower age groups who had been classified as available; that this letter should have been regarded as sufficient notice that the recipients were needed; that notices would be sent to older men up to 45 as they were needed; that the fact that not all men in the lower age group had received letters must be assumed to be because some were classified as not available because they were essential to hospital or teaching staffs or for other reasons could not be spared from their communities.

It was agreed that a general letter should go out to all members explaining the precise functions of the Procurement and Assignment Service and that only men in the lower age groups who are now classified as available and those in older ages who are unmarried would be especially asked to apply for commissions for the present. All men under 45 should hold themselves in readiness to apply, however, as they are needed. It was also pointed out that when the quota for Minnesota is filled (approximately 400 more by January 1) no further applications would be urged by PAS.

Discussion also brought out the fact that any man who is classified as available may appeal to the state committee on Procurment and Assignment for a change in the classification if he believes a mistake has been made. Men who have been placed in A-1 in the draft may also appeal the decision of the draft board within ten days if they feel an injustice has been done.

Major Wood said that Minnesota is doing as well or better than the average in providing medical officers but that the Army needed 5,000 more physicians by the end of July and that Minnesota had produced, through his office, only 33, actually signed up and sworn in, and that he is certain the rest of the states had not produced enough to make up the remainder.

Dr. Braasch said that the action in Alaska has precipitated the need for more doctors quickly, that whereas they had aimed at 6.5 doctors for each thousand men previously they were now asking for 10 doctors per 1,000 and that quick action by the recruiting boards in coöperation with Procurement and Assignment was essential.

It was re-emphasized that draft boards are now accepting the classification as to availability made by PAS and that no physician classified in A-1 who applied for a commission would be inducted as a private for the present, but that he runs the risk, if he does not apply in time, of being drafted, provided he has not appealed on ground of undue hardship and been deferred by his appeal board. There is a physician on each appeal board and all such cases will be given consideration.

Dr. B. B. Souster of Saint Paul, secretary of the Minnesota State Medical Association, then read a newspaper account of the talk made by Manpower Director Paul V. McNutt at the Atlantic City meeting of the American Medical Association.

DR. BRAASCH: The newspaper accounts of McNutt's speech were not complete and did not emphasize his clear statement against state medicine which accompanied the call to doctors to go into the service.

DR. BUIE: I heard Mr. McNutt's speech in Atlantic City and I was aroused but not insulted by it. I fear some of us fail to realize that the Office of Procurement and Assignment was conceded to us by the Army officials in response to the request of representatives of the American Medical Association. Mr. McNutt's technique offended many physicians. Certainly no one would accuse him of courting our political favor. His remarks were intended to arouse members of the American medical profession to a full realization of the gravity and urgency of the problem which he presented. I am not sure that he was entirely successful in doing much more than aggravating many of his hearers. Certainly there has not been a sensational increase in requests for commissions.

The American physician needs the Office of Procurement and Assignment. I hate to think of what his fate might be if the Manpower Board should take over the job of recruiting the medical corps. Mr. McNutt warned us to do the job "or else" and it was that "or else" which caused the irritation. If we will pause and analyze our position, I am sure that we will realize that discreet action is needed or we may be forced to accept an arrangement which may differ little from the civilian selective service.

There is some justification for the attitude of those who have criticized the Office of Procurement and Assignment but any failure should not be attributed to the State Committee or to Major Wood of the Medical Recruitment Board. This committee is not to blame for the present confusion and obviously Major Wood

has dealt with his problem with efficiency and commendable tolerance.

Confusion should be expected. It could scarcely be otherwise while we are attempting to increase an army from thousands to millions within a period of a few months. Lt. Col. Seeley, executive officer for the National Office of Procurement and Assignment, admitted that the early methods were productive of misunderstanding long before the State Committee was created. I believe the state offices of Procurement and Assignment were established in order to iron out difficulties which arose as a result of plans promulgated by the Washington office. You will recall that early we were advised to "sit tight" and to wait. Recently this position was reversed and now the utmost speed is desired. If physicians appear apathetic it is because they have been following instructions; but these instructions did not emanate from the State Office and the members of that committee should not be blamed Nevertheless, the problem is now an urgent one and the responsibility for its achievement rests squarely on the shoulders of that body of men. They have an immediate and pressing task and they are trying to accomplish it. The physician is not to blame because he appears to be delinquent. As a matter of fact, it is probable that there has been no delinquency on his part in the majority of cases. Right now, however, it is clear that we will improve our position by a discontinuance of these considerations. Instead, we should make an earnest effort to carry out the scheme which is now proposed by Dr. Braasch and his committee and by Major Wood. We need their protective influence. We should consider them our own local committee and through it we can accomplish much more than through an office in Washington or by some form of drafting. If we will do this, I prophesy that there will be a gratifying response to the letter which Dr. Braasch has promised.

Lt. Commander Miller said that the Navy is not sending out any letters, that it is relying solely on men who come into the office voluntarily and that men who do so apply, pass the physical examination and secure recommendation there for commission, will be cleared with their draft boards even though there is a delay of some six weeks in getting their commissions from Washington.

The Speaker then called upon Dr. A. W. Adson of Rochester to give the report of the delegates to the American Medical Association.

Dr. Adson: The meeting was called to order on Monday, June 8, 1942. A very large proportion of the delegates, in fact larger than any other initial meeting (164 out of a total of 175) were present. The usual reports such as the annual address of the Speaker of the House, the President, and the President-elect were presented and should be read in the *American Medical Association Journal.*

The report of the Secretary, Dr. Olin West, shows the gradual increase in the number of physicians belonging to the American Medical Association. In the last year there has been an increase from 118,441 to to 120,701. In the state of Minnesota, the membership has shown a very substantial increase.

The discussion of what to do with doctors who enlist in the Army, so far as the Medical Association dues are concerned, is not a concern of the American Medical Association. There are no dues to the American Medical Association. A doctor pays eight dollars for the *Journal of the American Medical Association.*

There are nine trustees appointed or elected at staggered intervals by the House of Delegates. These are chosen from points throughout the United States, usually because of their activities in things concerned with the American Medical Association. They are elected for two terms of five years each and really constitute the Board of Directors of the American Medical Association. Financially, the gross income for 1941 was $1,939,127.39; the net income was $223,347.64. Of this, $77,424 represents interest on investments. There are employed by the AMA some 644 persons, so one can readily see that this is a large organization.

Another topic was the *Journal of the American Medical Association.* Minnesota averages very high in number of physicians in the state who subscribe to the *AMA Journal,* the average of this state being 57 per cent. This is a fine journal and more physicians should subscribe. Some of the special journals which the Association prints show a profit and some a loss—but they are continuing as before and reducing the size of two of them. During the year a new magazine has appeared on the list called *War Medicine,* which deals with all phases of war and its treatment as far as medicine is concerned, and it should be very much in demand during this period of stress. It has made a very fine and satisfactory increase in its circulation, and the Association feels proud of this magazine.

As you know, there are many subdivisions of the Association and one of them is the Council on Pharmacy and Chemistry which works in conjunction with governmental agencies in the standardization of drugs. Many new drugs have come out during the past year, probably more than usual, and much of the time of this Board has been spent on their proper nomenclature, and as to whether or not they shall meet with the approval of the American Medical Association. Their various publications are available through the *Journal of the AMA.*

The Council on Physical Therapy is continually getting out reports on different physical ailments and classifying physical therapy procedures and machines. Those that are approved at least have merit.

The Council on Foods and Nutrition has been chiefly concerned with the question of fortifying foods with vitamins and certain minerals and still keeping within certain bounds. They have approved, however, supplementing with $B_1$ along lines suggested by the National Research Council governing the Food and Drug Administration. They are in favor of adding vitamin E to oleomargarine to raise the standard of this product to the level set by the Food and Drug Administration. The question of mixed vitamin therapy was discussed and more or less rejected.

The Council on Industrial Health is a very active group and does a lot of work. They are stressing the question of physical examinations in industry now and care of occupational diseases. They are making progress, and this is a fertile field at this time.

In 1941, 2,806 package libraries were distributed by request to every state in the Union, to the District of Columbia, Canal Zone, Hawaii and Mexico; 12,833 periodicals were loaned in the same period; 6,650 reference questions were answered; 7,279 copies of the directory of the American Medical Association were sold.

The Council on Research has studied artificial respiration, specifications for Ultra-Violet lamps used for disinfecting have been formulated, methods for estimating loss of hearing have been studied.

In 1941, the Bureau of Health Education answered 10,000 letters from laymen, over 300,000 pamphlets were sent out, 88,000 health posters were sent to industrial plants. They have coöperated with the editor of *Hygeia* and for six years this bureau has been on the air. The director and assistant director have appeared before 148 audiences in 16 states. This involved 43,000 miles of travel. They have coöperated with various lay organizations, 4-H clubs, National Congress of Parents and Teachers, American Public Health Association, National Health Council, National organization for Public Health Nursing, county and state medical societies and governmental agencies.

Approximately 10,000 inquiries were submitted to the Bureau of Investigation. They came from physicians, laymen, governmental agencies, business concerns, commercial organizations, newspapers, radio stations and

high school and college students. The subjects most frequently asked about were so-called cancer cures epilepsy, diabetes, coal tar drugs, cathartics and the treatment of colds.

The Bureau of Legal Medicine and Legislation always has many problems on its desk. A good deal of importance this year has been attached to the taxation of Accounts Receivable of a person whose practice has ceased. They are working hard on this problem and will probably straighten it out in a short time.

During this war period there is much concern with the question of priorities in war procedures. If anyone has any definite problems with respect to this question he can write to the AMA and have them straightened out there for him.

It might be stated here, as you have probably noticed in the papers, that the Court of Appeals in Washington has decided adversely to the American Medical Association. It is the understanding that this matter will be carried to the Supreme Court.

In the Bureau of Medical Economics, most of the work during the past year has been switched to the Procurement and Assignment Service. Work has been done on a prepayment medical service plan, but nothing very definite has been brought to a focus and most of the progress has been in study and observation. Do not, however, think for a minute that this question of the economic future of medicine, etc., has been dropped. Progress is always being made although something might overshadow it for the time being. One should constantly, every week, read his *Journal* very carefully in order to keep posted on proceedings of all Councils.

Several incidental things which are not distinctly connected are introduced at this time for your comment. The delegates approved setting up schools for medical laboratory technicians in medical schools approved by the Bureau of Medical Education. Another resolution that was discussed with emphasis was that concerning certificates to prostitutes who are particularly prevalent around Army Camps. Many have been issued certificates of good health by physicians. It was decided that this was decidedly unethical and was not approved of in any way, shape or manner.

An attempt was made by a resolution to increase the number of trustees from nine to eleven, so as to get a better distribution of the trustees as far as geographical areas are concerned. This, however, failed because eleven is too many. A better way to handle it would be to be more careful in the selection of trustees and this year a trustee was elected from California, which section of the country has not had representation before. The same question which came up last year about the *recognition of women* doctors as officers in the Army and Navy was again presented and again turned down. A resolution was introduced approving and encouraging the National Physicians Committee in the work which they have done, but clarified by the statement that this is not a branch, or in any way connected with the American Medical Association as an institution. There was a resolution introduced asking for recognition of the American College of Apothecaries. This was turned down because it is not the policy of the Association to recommend any Associations outside of our own profession.

A highlight of the evening meeting was an address by Mr. McNutt of Washington. His talk was on the need for physicians. He stated the United States needs 5,000 doctors by July 1, 1942, and there seems to be a lack of interest on the part of the medical profession. The Procurement program, he says, may fail. He stressed the need also of medical men in boom towns which have sprung up because of the defense program. If an adequate number of physicians do not volunteer for service, he said, it may be necessary for the government to draft them

By and large, the attendance was a little less than it has been in previous years, during the first two days. Compared with the last meeting of the American Medical Association there was only a loss of 300 in registration, at first, but on the third day this loss stepped up to nearly 1,000. The threat of war, the possibility of bombardment, a blackout of Atlantic City, along with the rubber shortage, detracted a great deal from the total. It was our impression, however, that the scientific exhibts and the commercial exhibits were on a par with any previous meeting that we have attended.

It may be said in general, that we believe that the American Medical Association is making very decided progress in furthering our individual interests as well as keeping medicine to the fore. They are keeping a sharp outlook on the question of Socialized Medicine and they are coöperating 100 per cent with the Army and Navy in the question of the Procurement and Assignment Board. If there is anything wrong anywhere, it is with the individual member and not with the Association itself.

Dr. Adson further reported as follows: You may be interested in a brief description of procedure in the House of Delegates. The very able speaker is Dr. Shoulders, a quick-witted Southerner, well versed in parliamentary procedure. Dr. Fouts of Omaha is vice speaker and these two are on the platform continuously with Dr. Olin West to keep them posted on agenda. All delegates receive a report with names of officers, reports from the councils and bureaus, a financial report of the association and names of reference committees. Resolutions are presented from the floor and referred to proper reference committees. Those interested in the resolutions may go before the reference committees. These committees are very active and tear them apart or bring in a majority or minority report or adopt them as the case may be. Anyone may bring in a resolution and it will be considered.

Among this year's resolutions was an interesting one brought in by Ohio and adopted and referred for action to the Board of Trustees which operates in the same manner as our council. This was a resolution to petition the Army for refresher courses for men in service so as to prepare them better for return to private practice. The resolution asking that women physicians be accepted in the medical corps of the Army was turned down again. Dr. Braasch told you about the resolution endorsing activities of the National Physicians' Committee. It was decided, in case the usual big meeting scheduled in 1942 at San Francisco had to be abandoned, the House of Delegates would meet in annual session at Chicago. Dr. Paullin of Atlanta was elected president and Dr. Hassig was reëlected trustee.

The Speaker announced that a booth had been arranged by Mr. Rosell in the Armory as headquarters for Major Wood and Lt. Commander Miller who will be there to answer questions about service in the Army and the Navy. He then asked Dr. M. C. Piper, chairman of the Historical Committee, to present the following Necrology report:

### NECROLOGY REPORT

Hallward M. Blegen, Warren. Born 1885. University of Minnesota 1909. Died March 26, 1942. Aged 57.

John H. Bong, Jasper. Born 1872. Minneapolis College Physicians and Surgeons 1897. Died December 13, 1941. Aged 69.

Donald R. Claydon, Red Wing. Born 1902. University of Louisville 1926. Died August 28, 1941. Aged 39.

Herman B. Cole, Redwood Falls. Born 1872. University of Buffalo 1896. Died March 29, 1942. Aged 70.

Raymond E. Doering, Minneapolis. Born 1894. St. Louis University 1924. Died January 13, 1942. Aged 48.

Eric O. Giere, Minneapolis. Born 1868. University of Minnesota 1892. Died February 12, 1942. Aged 74.

Norven H. Gillespie, Duluth. Born 1874. Queen's University 1896. Died March 26, 1942. Aged 68.

Robert Graham, Duluth. Born 1865. Wayne University 1893. Died September 22, 1941. Aged 76.

Stephen B. Haessly, Faribault. Born 1875. University of Illinois 1904. Died January 11, 1942. Aged 67.

Arthur L. Herman, Minneapolis. Born 1900. University of Minnesota 1923. Died April 24, 1942. Aged 42.

David J. Jacobson, Bemidji. Born 1891. Drake University 1913. Died April 17, 1942. Aged 51.

Joseph R. Kuth, Duluth. Born 1881. University of Minnesota 1904. Died August 1, 1941. Aged 60.

J. C. Markoe, Saint Paul. Born 1856. Jefferson Medical College 1882. Died November 28, 1941. Aged 85.

Charles F. McNevin, Saint Paul. Born 1877. Northwestern University 1908. Died February 16, 1942. Aged 65.

William W. Moir, Minneapolis. Born 1881. University of Minnesota 1906. Died February 3, 1942. Aged 61.

Reuben Pennington, Minneapolis. Born 1893. University of Minnesota 1930. Died February 25, 1942. Aged 49.

John A. Pratt, Minneapolis. Born 1868. University of Michigan 1894. Died February 21, 1942. Aged 74.

Franklin W. S. Raiter, Cloquet. Born 1889. Milwaukee Medical College 1911. Died October 2, 1941. Aged 52.

Lemuel M. Roberts, Little Falls. Born 1862. Hahnemann Medical College 1883. Died October 9, 1941. Aged 79.

Jesse A. Slocumb, Plainview. Born 1873. University of Illinois 1895. Died July 3, 1941. Aged 68.

Edward O. Thorson, Luverne. Born 1875. Bennett College Eclectic Medicine and Surgery 1906. Died May 27, 1942. Aged 67.

T. C. Clark, Minneapolis. Born 1853. Rush Medical College 1883. Died June 20, 1942. Aged 89.

The meeting adjourned until 12:15.

## Monday Session

Having ascertained from Dr. Bayley, chairman of the Committee on Credentials, that a quorum was present, the Speaker called for a report of the Council from Chairman W. L. Burnap.

Dr. Burnap thereupon reported that the Council at its Monday morning meeting had agreed to coöperate in every way possible with the work of the State Procurement and Assignment Committee and had directed that an article for MINNESOTA MEDICINE and a statement in the monthly News Letter should be prepared so that not only doctors in the draft age but all older physicians also would be informed.

The Council recommended, also, that the delegates to the AMA whose terms expire December 31, 1942, namely Dr. W. A. Coventry of Duluth and Dr. A. W. Adson of Rochester, together with alternates Dr. J. C. Hultkrans of Minneapolis and Dr. W. L. Burnap of Fergus Falls, be reëlected by the House of Delegates.

Dr. E. J. Simons of Swanville, chief of the Medical Unit of the Division of Social Welfare and a member of the Council, reported for the information of the Council that selectees rejected from the draft because of tuberculosis cannot be accommodated for treatment at the present time in the county sanatoria because of lack of beds. These cases should be referred first to the family physician, and then referred by him, if necessary, to the sanatoria.

The request from the Editing and Publishing committee for approval of a new policy with respect to editorial notices about advertising matter in MINNESOTA MEDICINE was referred to the committee for an expression of opinion prior to taking action. It was suggested also that the committee confer with the editor of the *Journal of the American Medical Association* before adopting a policy in the matter.

The resolution presented to the State Conference of Social Work last spring calling for a radical increase in funds to be appropriated to public health work and medical care for the needy was tabled at the last conference of that body, Mr. Rosell reported. Appointment of a committee made up of representatives from the State Board of Health, the State Medical Association and the State Dental Association to meet and study the problem was made by the Conference as a substitute action.

Mr. Rosell also called attention of the Council to the report printed in the *Congressional Record* of a proposed Technical Corps made up of chiropractors to be organized under the Specialists Corps; also a bill introduced into Congress asking appropriation for setting up military medical schools in each Corps Area for two-year courses in medicine.

At the request of Dr. Burnap, Dr. Braasch outlined again the plan of the State Procurement and Assignment Committee to send out a letter to every man classified as available in the state. Those up to the age of thirty-seven plus a few others over thirty-seven who are single men and can be spared from the community will be asked to apply for commissions at once. The older men up to forty-five will be asked to hold themselves in readiness for a call should the need arise.

Any men who feel that they have been classified mistakenly are to be invited to appeal their cases for a hearing by the state committee. Applications should be made preferably to Major Wood in the Medical Recruiting Board in the Lowry buliiding in St. Paul or to the Surgeon General in Washington. Navy applications are to go to Lt. Commander Miller, Roanoke Building, Minneapolis.

In response to questions, Dr. Braasch reëmphasized that the recipients of the letter should apply at once, that Selective Service would also be supplied immediately with names of men who have been made available. It was moved, seconded and carried that the report of the Council be accepted.

Dr. Burnap moved that the delegates pass a vote of confidence in Dr. Braasch and the State Committee on Procurement and Assignment and that they express the willingness of the association to coöperate in every way possible. The motion was seconded and carried unanimously.

The Speaker then called on Dr. R. L. J. Kennedy of Rochester, chairman of the Committee on Child Health to report on the plan for aid to mothers and babies of men in service.

DR. KENNEDY: In a communication from the United States Department of Labor, Children's Bureau, Division of Health Services, to Dr. A. J. Chesley, it was recommended that State Health Agencies develop plans to finance from MCH funds the obstetric, pediatric and hospital care needed by wives and children of men in active military service who are unable to pay for such care.

In order to make this possible the Children's Bureau has set aside 10 per cent of the MCH fund B, appropriated for the fiscal year 1943, which amounts to $198,000, for allotment to the State Health Agencies wishing to establish these services.

This committee recognizes as does the state association that the problem in question, if it exists, is one which must be met for the duration of the present war.

Pursuant to suggestions received from the Director of the Division of Health Services, Children's Bureau, United States Department of Labor, and in view of the conditions which may develop in our state during the present war, this committee desires to submit to the House of Delegates the following recommendations:

1. That the Minnesota State Medical Association approve of a request by the State Board of Health to the Children's Bureau for funds with which to defray the cost of this service in Minnesota. The amount necessary to carry on such a program in this state cannot be determined with accuracy at this time because of the unknown factors involved. It is suggested, however, that information on which to base the amount to be requested can and will be obtained by the State Board of Health through contact with the various County Welfare Boards and the American Red Cross Chapters and other sources, relative to the present case load and to the recent past experience in this field. While it is impossible to formulate in detail plans for carrying out the program, certain principles should be adhered to in so far as possible.

2. *Eligibility.*—All expectant mothers in the state, irrespective of legal residence, whose husbands are in active military service (U. S. Army or U. S. Navy, including Marine Corps and Coast Guard) and not commissioned officers, should be eligible for obstetric and hospital services provided under the MCH program, without cost to the family, whenever to the knowledge of the state health agency such obstetric and hospital services are not otherwise available. Any child under 1 year of age whose father is in active military service, but not a commissioned officer, may be eligible for pediatric and hospital care under the MCH plan.

(NOTE: "Under 1 year of age" is suggested since the present funds available are insufficient to provide care for all children in these families.)

3. It has been agreed in this committee that in order to

(a) expedite the carrying out of the program

(b) define sharply the responsibility of the federal, state, and local agencies involved in the program and

(c) avoid the cost of separate administration, it is proposed that the County Welfare Boards with the aid and advice of

their respective medical advisory committees be asked to assume the responsibility of determination of eligibility for this assistance. Suitable forms will be supplied by which requests for this assistance may be made either upon the patient's application to the County Welfare Board or to her attending physician. Such request for assistance properly filled out will be submitted by the County Welfare Board to the State Department of Health for approval and authorization. In cases where the necessity for consultation arises, the proper consultant shall be supplied through arrangement with the county medical advisory committees.

4. Services are to be rendered by doctors of medicine licensed to practice in Minnesota by the State Board of Medical Examiners.

5. Hospitalization should be authorized only in those hospitals that have been listed by the State Board of Health for this purpose.

6. Cost of obstetric, pediatric and hospital service: obstetric and pediatric fees should be paid for in conformity w th the average current fees for such services as have been found to obtain in 60 of the 84 rural counties of the state, as determined in the survey of medical fees in Minnesota made by the state-wide medical advisory committee in 1941. It is estimated that the average cost for the care of the normal obstetric case will be $35; for hospital care for mother and baby $35; and for care of the baby during first year of life $30.

7. Payments should be made to the attending physician by the State health agency upon the receipt of a satisfactory maternity or pediatric record, on forms prepared by the State health agency for the use of the attending physician.

8. Hospital care that has been authorized by the State health agency should be paid for at the per diem rate of the hospital concerned. Pediatric care should also be paid for on this per diem basis. Payments should be made to the hospital upon receipt of record showing the date and hour of admission and discharge of each patient for whom care was authorized by the State MCH director.

DR. KENNEDY: This is not a detailed recommendation because details are impossible to work out. It is a statement of principles for your consideration, requested by Dr. Chesley as a guide for State Board of Health action which must be made this month.

It was moved that the recommendation be accepted and the Speaker called on Dr. Helen Curtis of the Children's Bureau in Washington to discuss the matter.

DR. CURTIS: These recommendations appear to meet the principal requirements of the Children's Bureau. Of course they may vary from state to state to meet local situations. For instance, in some states it is not possible to require 10 days' hospitalization because beds are insufficient. In some states it may not be possible to require that all medical participants be graduates of Class A schools. Your recommendations call for regularly licensed practitioners. I do not know what is required for a license in Minnesota.

At the request of the Speaker, Dr. Adson informed Dr. Curtis that licensees in Minnesota are required to graduate from a Class A school, to be American citizens and to pass basic science and State Board of Medical Examiners' examinations.

Dr. Curtis declared that the requirement for license here would more than meet Chlidren's Bureau requirements for those who are to give service under the plan.

Dr. Curtis said, in response to questions from the floor, that it was not expected that Social Security funds would finance the plan beyond the first few months, but that, where necessary, new funds would be asked later for the purpose; that the plan would be administered through the State Board of Health; that each state would make its own estimate of the amount needed to administer the plan and that the staff of maternal and child health divisions of the departments of health would be used generally, and that it would certainly be an economy to use existing Social Service agencies also; that only those soldiers' wives would benefit who were unable to obtain care out of their own resources, assuming that most men who are not receiving officers' pay might find it difficult to finance obstetric care, but each individual case would be considered on its merits; that no one state would receive less, depending upon the need; that funds come from appropriations already made and earmarked as an emergency measure for this purpose, though states may use other funds allotted for maternal and child health if the plan is approved. In cities where there are general hospitals, patients already eligible for care there would not be included in the plan but many wives moving about with their husbands would not be eligible to care in clinics and hospitals set up for care for local needy. In some cases the patient might be able to make part payment on care received and that principle should be adhered to wherever possible. The plan is set up with the idea in mind of starting things moving in the emergency and Dr. Curtis said, further, that women who for some reason were unable to get into a hospital would have to be delivered under the plan in their own homes. She was unable to answer the question about what would happen to the plan when the war is over. It is being set up to care for an emergency due to war service.

Dr. L. A. Barney of Duluth suggested from the floor that the plan looked like a form of state medicine. The motion to accept the recommendations of the committee was seconded and carried.

The Speaker then called upon Dr. R. W. Morse of Minneapolis, chairman of the Committee on Resolutions. Dr. Morse read the following resolutions, all of which were unanimously accepted.

WHEREAS we are now engaged in a war for the survival of our nation and our freedom and

WHEREAS the needs of our armed forces and of our industrial mobilization to provide the weapons and equipment needed by our brave fighting men supercede all lesser considerations having to do with the pursuits and aims of peace, be it therefore

RESOLVED that this House of Delegates here go on record pledging the members of the Minnesota State Medical Association individually and as an organization to devote themselves exclusively during the coming year and until the war is won to the provision of all needed medical services to the armed forces and to the civilian population at home regardless of what individual hardships it may entail; to do everything that may be in their power to improve the health of workers on the industrial front and to aid in organization of medical protection in civilian defense against attack and sabotage at home to the end that medicine may continue in the high tradition of sacrifice and service established by our forebears in Minnesota.

* * * * * * *

WHEREAS a bill known as H. R. 7231 has been introduced into the Congress which provides for nine schools of military medicine to be organized and operated on the plan of the military and naval academies at West Point and Annapolis and

WHEREAS it is proposed in this bill that students with premedical training shall be accepted by Congressional appointment and shall be given a brief course on military surgery, leaving out much of the basic training necessary to the practice of all the specialties, including military surgery, and all of the training in branches that do not pertain directly to the care of soldiers in the armed forces and

WHEREAS graduates of these schools, one in each Corps Area, would be commissioned as officers in the Army Medical Corps and would be available, according to the sponsor of the bill, to man many government services after the war is over including the Veterans' Administration Facilities, the United States Public Health Service, and any government health insurance project which might be set up in the future, and

WHEREAS the existence, under government sponsorship, of schools whose graduates, though inadequately trained, would be accepted as physicians because of their commissions in the Army Medical Corps would endanger the high standards of medicine developed in America after a period of long and painful endeavor on the part of physicians and educators with the staunch support and coöperation of high officials in the Army, Navy and Marine Corps, Be it therefore

RESOLVED that this House of Delegates go on record in unanimous disapproval of any schools of medicine which do not offer a well-rounded course in accordance with the best standards of medical education in America and that this resolution be sent to members of the House and the Senate from Minnesota.

* * *

WHEREAS the State Board of Health has carried on a consistently sound and forward looking program of public health and preventive medicine in Minnesota during the past year in spite of heavy demands occasioned by the war emergency and

WHEREAS the Board has also generously coöperated with its endorsement and with material aid in the special programs undertaken by the Minnesota State Medical Association including the tuberculosis control program, the campaign for vaccination and immunization, the program and studies of the Committee on Maternal Health and the nutritional program, especially in the preparation, publication and distribution of the four nutrition pamphlets which formed an important part of the campaign for better nutrition in the state,

BE IT RESOLVED that this House express its profound appreciation to the Board and to Dr. A. J. Chesley, secretary and executive officer, and his staff, for their interest and assistance in these special programs and for their fine coöperation with the doctors of the state in all movements looking to the improvement of the health of the people of Minnesota.

WHEREAS the State Board of Health has carried on an outstanding program for control of preventable disease and especially of venereal disease in this state for many years, and

WHEREAS this notable program which has reduced the incidence of syphilis in Minnesota to a rate which is below that of most of the states in the country by utilizing expert medical services on a part-time basis, and

WHEREAS this policy has had the approval and close coöperation of the entire medical profession of the state, Be it Therefore

RESOLVED that the House of Delegates of the Minnesota State Medical Association hereby officially endorses the policy of the Minnesota State Board of Health with respect to control of preventable disease and regards with disapproval the suggestion recently made by the United States Public Health Service that full-time medical service be substituted for it in the program of disease control in Minnesota.

* * *

The thanks of this House are extended to the St. Louis County Medical Society and the Committee on Local Arrangements headed, in the absence of Dr. T. G. Clement, by Dr. M. McC. Fischer for their fine entertainment and excellent arrangements which have contributed so much to the interest and enjoyment of this great meeting.

* * *

The Appreciation of this House is likewise accorded to Radio Stations KDAL, WEBC and WDSM for their generous contribution of time for broadcasts by our distinguished guests. Such broadcasts constitute a valuable addition to our program of public education about the developments of medical science and the progress of our control over disease.

* * *

To the newspapers and news services of the state for their extensive and accurate reporting of the events of this meeting this House expresses its gratitude and its recognition also, of the invaluable assistance given by the press throughout the year to the program of public health education carried on by this association.

* * *

The House of Delegates also wishes to note the unfailing courtesy and helpfulness of the Hotel Duluth and its staff and to record especially its thanks to the manager, Mr. Siegrist, for his generous attention to the comfort and convenience of all who have attended the many business committee meetings and entertainments housed in this hotel.

The Speaker then called for nominations for the office of president-elect.

Dr. J. M. Hayes of Minneapolis placed in nomination the name of *Dr Stephen H. Baxter* of Minneapolis for *President-elect.* There being no other nominations, it was moved, seconded and carried that the nominations be closed and that the Secretary be instructed to cast a unanimous ballot for Doctor Baxter.

DR. BAXTER: When you contemplate something that may perhaps take place in the future, you think you can prepare for it and being forewarned is to be forearmed! But when the event comes, it takes your breath away anyway, and you find yourself speechless. Fortunately this is not the time for a speech, anyway, and so I shall content myself by saying thank you for this great honor.

*Dr. J. F. Norman* of Crookston was then nominated for *First Vice President* and, there being no further nominations, it was moved, seconded and carried that the nominations be closed and that the Secretary cast a unanimous ballot for Dr. Norman.

*Dr. F. W. Lynch* of Saint Paul was nominated for *Second Vice President* and, there being no further nominations, it was moved, seconded and carried that the nominations be closed and that the Secretary cast a unanimous ballot for Dr. Lynch.

*Dr. B. B. Souster* of Saint Paul was nominated to succeed himself as *Secretary* and, there being no further nominations, it was moved, seconded and carried that the nominations be closed and that the Executive Secretary cast a unanimous ballot for Dr. Souster.

*Dr. W. A. Condit* of Minneapolis was nominated to succeed himself as *Treasurer* and, there being no further nominations, it was moved, seconded and carried that the nominations be closed and that the Secretary cast a unanimous ballot for Dr. Condit.

Nominations for the office of Speaker of the House of Delegates being called for, Dr. E. A. Meyerding of Saint Paul, Vice Speaker, took the chair.

Thereupon, *Dr. W. W. Will* of Bertha was nominated to succeed himself as *Speaker* and, there being no further nominations, it was moved, seconded and carried thaat the nominations be closed and that the Secretary cast a unanimous ballot for Dr. Will who then resumed the chair.

*Dr. E. A. Meyerding* of Saint Paul was nominated to succeed himself as *Vice-Speaker* and, there being no further nominations, it was moved, seconded and carried that the nominations be closed and that the Secretary cast a unanimous ballot for Dr. Meyerding.

*Dr. A. E. Sohmer* of Mankato was nominated to succeed himself as *Councilor of the Fourth District,* and there being no further nominations, it was moved, seconded and carried that the nominations be closed and that the Secretary cast a unanimous ballot for Dr. Sohmer.

*Dr. Archie E. Cardle* of Minneapolis was nominated as *Councilor of the Sixth District,* and there being no further nominations, it was moved, seconded and carried that the nominations be closed and that the Secretary be instructed to cast a unanimous ballot for Dr. Cardle.

*Dr. W. L. Burnap* of Fergus Falls was nominated to succeed himself as *Councilor of the Eighth District* and, there being no further nominations, it was moved, seconded and carried that the nominations be closed and that the Secretary be instructed to cast a unanimous ballot for Dr. Burnap.

*Dr. W. A. Coventry* of Duluth was nominated to succeed himself as *delegate to the American Medical Association,* and there being no further nominations, it was moved, seconded and carried that the nominations be closed and that the Secretary be instructed to cast a unanimous ballot for Dr. Coventry.

*Dr. J. C. Hultkrans* of Minneapolis was nominated to succeed himself as *alternate* for Dr. Coventry and, there being no further nominations, it was moved, seconded and carried that the Secretary cast a unanimous ballot for Dr. Hultkrans.

*Dr. A. W. Adson* of Rochester was nominated to succeed himself as *delegate to the American Medical Association,* and, there being no further nominations, it was moved, seconded and carried that the nominations be closed and that the Secretary be instructed to cast a unanimous ballot for Dr. Adson.

*Dr. W. L. Burnap* of Fergus Falls was nominated to succeed himself as *alternate* to Dr. Adson and there being no further nominations, the Secretary was instructed to cast a unanimous ballot for Dr. Burnap.

An invitation to meet in 1943 in Minneapolis was extended by Dr. J. M. Hayes.

It was moved, seconded and carried that the invitation be accepted and that the 1943 meeting of the association, if it is to be held, take place in Minneapolis.

SPEAKER W. W. WILL: It is my belief that not enough of the information and stimulation that comes out of these state meetings goes back to the county societies. I believe that the men back home should be informed immediately of what this House has done and that the problems brought up here should be more thoroughly discussed in our own societies. I should like to suggest, therefore, that the first meeting of all our societies following the state meeting be devoted exclusively to reports from the delegates and that others besides the delegates who took part in this session be invited to speak.

Dr. Hayes asked what plans had been made for newspaper publicity to counteract unfavorable notices already printed about the slowness of doctors to enlist in the armed services.

Dr. Braasch sketched again the plan of the State Committee on Procurement and Assignment which calls for a letter to all who have been classified as available, articles for MINNESOTA MEDICINE and the *News Letter* and statements to the newspapers showing the considerable contribution already made by Minnesota to the war effort.

It was pointed out by Dr. A. G. Liedloff of Mankato that many physicians who are over-age by present government standards have tried to apply and are willing to go as soon as they can be admitted.

There being no further business to come before the House, it was moved, seconded and carried that the meeting adjourn.

## REPORTS and ANNOUNCEMENTS

### AMERICAN COLLEGE OF SURGEONS CANCELS CLINICAL CONGRESS

The annual Clinical Congress of the American College of Surgeons which was scheduled to be held in Cleveland, November 17-20, 1942, was cancelled by the Board of Regents of the College at a meeting held in Chicago, Wednesday morning, October 14. Motivated primarily by patriotism, the Regents were influenced by the present conditions surrounding the general war program which have led to a greater burden on the members of the surgical profession in their local communities as a result of the large proportion of the profession which is serving with the armed forces. The Regents by this action took cognizance of the desire of the profession to do nothing which would interfere with the successful prosecution of the war program such as would be caused by temporary absence of its members from civilian duties during the period of the Congress, embarrassment of the transportation system, and interference with the work of the local profession in Cleveland in preparations and presentations incident to such a meeting.

### PEPTIC ULCER FILM

There is now available for free showings before groups of physicians the first complete movie film on peptic ulcer, in color and with sound track.

The film is entitled "Peptic Ulcer" and was produced under the direction of the Department of Gastroenterology of the Lahey Clinic of Boston. The American College of Surgeons has awarded its seal of approval to the film.

Running time of the film is forty-five minutes, 1,600 feet of 16 mm. film, and covers a presentation of the following problem of peptic ulcer: Pathogenesis, diagnosis, treatment, pathology, complications, including obstruction, hemorrhage, and perforation, gastric ulcer, surgery and jejunal ulcer.

Arrangements for a showing of the film may be made by writing to the Professional Service Department of John Wyeth and Brother, Inc., Philadelphia, who will provide projection equipment, screen, film, and operator for medical groups, without charge.

### MINNESOTA SOCIETY OF INTERNAL MEDICINE

At the meeting of the Minnesota Society of Internal Medicine held in Rochester, October 29, 1942, Dr. Paul G. Bowman of Duluth was elected president; Dr. B. T. Horton of Rochester, vice president, and Dr. Reuben G. Johnson of Minneapolis, secretary-treasurer (re-elected).

### SOUTHERN MINNESOTA MEDICAL ASSOCIATION

The Southern Minnesota Medical Association elected Dr. Alphonse E. Sohmer of Mankato as president at its annual meeting on September 28 at Rochester. He succeeds Dr. N. W. Barker of Rochester.

Dr. Fred L. Bregel, Saint James, was named first vice president; Dr. Ernest M. Hammes, Saint Paul, second vice president. Dr. Austin C. Davis, Rochester, was reëlected secretary-treasurer.

New members accepted into the society are Dr. G. L. Loomis, Winona, and Drs. G. G. Stilwell, D. G. Pugh, K. M. Simonton, Walter F. Kvale and W. H. Dearing, all of Rochester.

Announcement was made that the medal and $100 prize given annually by the society to the most proficient student in the University of Minnesota medical school graduating class had been awarded this year to Dr. John Schulze.

Drs. A. H. Wells, S. Boyer, Jr., and R. L. Nelson of Duluth were awarded the Society's medal for the best exhibit at the Minnesota State Medical Association's annual meeting. Their exhibit was on "Calcified Nodular Disease of the Aortic Valve."

Richard J. Dorer of the state department of conservation spoke at the dinner on "Our Most Fundamental National Problem: Conservation." Short talks were also given by Dr. H. Z. Giffin, president of the Minnesota State Medical Association, and Dr. Barker.

Civilian and industrial accidents were discussed by Drs. P. F. Dwan and R. C. Webb, Minneapolis, and Drs. H. K. Gray, R. K. Ghormley, H. H. Young, W. H. Bickel, T. H. Seldon and E. G. Wakefield, Rochester.

### SOUTHWESTERN AND LYON-LINCOLN SOCIETIES HOLD JOINT MEETING

The first of a series of two joint meetings of the Southwestern and the Lyon-Lincoln Medical Society groups was held October 6 at Slayton. Dr. P. W. Harrison of Worthington, president of the Southwestern Society, presided at the sessions.

Among those appearing on the program were Dr. R. K. Ghormley of Rochester, who spoke on "Fractures" and Dr. P. W. Brown, also of Rochester, who presented the subject "Intestinal Diseases."

Because of the central location of Slayton the second joint meeting will be held there also. This choice was made in the interest of conserving gasoline, oil and tires.

Arrangements for the meeting were made by Dr. Roy F. Pierson of Slayton.

### WABASHA COUNTY SOCIETY

The Wabasha County Medical Society held its seventy-fourth annual meeting at Lake City, Thursday, October 8, 1942, Dr. R. A. Glabe, president, presiding.

At the business session in the afternoon, the following officers were elected for the coming year:

President—T. G. Wellman, Lake City
Vice President—D. P. Dempsey, Kellogg
Secretary-Treasurer—W. F. Wilson, Lake City
Delegate to the State Association—E. C. Bayley, Lake City (reëlected)
Alternate—E. W. Ellis, Elgin
Censor for three years—D. G. Mahle, Plainview (reëlected)
Censors holding over—W. J. Cochrane, Lake City and W. H. Replogle, Wabasha

A pheasant dinner was served to the members, their wives, and invited guests through the courtesy of the Lake City physicians.

At the scientific session in the evening, the following program was presented:

PRESIDENT'S ADDRESS—"Pain as a Symptom of Appendicitis"—R. A. GLABE, M.D., Plainview.

REPORT on the Proceedings of the House of Delegates at the Annual Meeting held at Duluth, June 29 to July 1, 1942—E. C. BAYLEY, M.D., Lake City.

MOTION PICTURE DEMONSTRATIONS

I. "Proctoscopic Diagnosis"—N. D. SMITH, M.D., Mayo Clinic, Rochester.

II. "Correction of Nasal Deformities"—From the Washington University School of Medicine.

Dr. A. J. Chesley, executive officer of the State Board of Health, gave a short talk on the civilian defense program.

Dr. V. O. Wilson reported on the new rules pertaining to maternity and child welfare care in the families of those absent in military service.

There were twenty-nine in attendance, including members and guests.

W. F. WILSON, *Secretary.*

## WASHINGTON COUNTY SOCIETY

The regular monthly meeting of the Washington County Medical Society was held October 13. The secretary reported that examinations of the 4H Club members of the county were made as usual during September by the Stillwater doctors.

Guests at the meeting were Dr. A. J. Chesley, Executive Secretary of the Minnesota State Board of Health and Dr. D. A. Dukelow, also of the State Board, who addressed the meeting on Public Health Nursing, its great value to any community and how to obtain nurses for such work in counties not now so favored. Dr. Chesley made some comments and in addition briefly touched on the health situation now and as it is going to be affected by the war.

E. SYDNEY BOLEYN, M.D., *Secretary*

## WEST CENTRAL SOCIETY

The West Central Medical Society held its fortieth anniversary meeting in Morris, October 14, 1942. Judge E. R. Selnes gave a talk on "Medical Jurisprudence" and Dr. C. E. Caine spoke on "The Medical History of Stevens County."

Dr. F. W. Behmler was elected president; Dr. Otto Bergan, vice president; Dr. Herman Linde, secretary-treasurer; Dr. C. I. Oliver, delegate to the state convention, and Dr. Charles Bolsta, alternate.

At this meeting there were four charter members in attendance: Drs. Charles Bolsta, E. E. Caine, J. R. Elsey and C. I. Oliver. Each one of these members made an appropriate speech for the occasion. At the time the West Central Medical Society was organized there were fourteen charter members; at the present time the membership is twenty-eight.

HERMAN LINDE, *Secretary*

## WOMAN'S AUXILIARY

MRS. RAYMOND J. JOSEWSKI, *President*
Stillwater, Minnesota
MRS. W. H. RUCKER, *Publicity Chairman*
Minneapolis, Minnesota

### Hennepin County

The year's program for the Hennepin County Auxiliary opened with a tea for new members and officers at the home of Mrs. Frederick Schaaf.

Two new projects are under way in Hennepin County this year. One is the Red Cross dressing group, which was organized last year, but, due to lack of supplies, did not begin to function until this year. Mrs. J. P. Hiebert is chairman with Mrs. J. M. Hall acting as co-chairman.

The second activity is the staffing of a War Savings Stamp booth in the Medical Arts lobby with Mrs. Hugh Tunstead in charge. Both war projects are carried on with the coöperation of the Dental Auxiliary.

### Nicollet-Le Sueur County

The auxiliary of the Nicollet-Le Sueur County Medical Society met September 22, 1942, at St. Peter. Dr. A. V. Stoesser of the University of Minnesota department of Pediatrics spoke on "Allergy." Mrs. J. P. Josewski, State President, spoke to the assembly.

### INDUSTRIAL HEALTH

*(Continued from Page 901)*

factor. It may provide a variety of movements or it may use a few muscles over and over again. Skilled labor is more fatiguing than unskilled labor. Speeds of work above that which give maximum efficiency and above the natural rhythm of the workers are unfavorable.

### Group Diagnosis Helps

One of the simplest ways to learn whether the ill health, accident proneness and loss of efficiency of a worker are due to fatigue incident to occupation is to examine the group in which he works. Although there are individual differences in the reaction to occupational environment, certain common factors provide necessary data for group diagnosis. These include occupational mortality and morbidity rates, accident and efficiency rates, short-time absence and labor turnover rates.

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*A physician is an unfortunate gentleman who is every day called upon to perform a miracle, namely to reconcile intemperance with health.*—VOLTAIRE.

## OF GENERAL INTEREST

Dr. Walter A. Carley announces the opening of offices at 1124 Lowry Medical Arts Building, Saint Paul, with practice limited to Psychiatry and Neurology.

* * *

Dr. T. F. Crabbe, member of the staff of the Cass Lake Indian Hospital since July, left in October for South America. He will be in government service in Brazil, where he is being sent because of his knowledge of tropical diseases.

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Dr. H. O. McPheeters of Minneapolis presented a paper on "Present-Day Treatment of Varicose Veins" before the Post Graduate Assembly in Chicago, on October 26.

* * *

Dr. Wallace E. Herrell of Rochester addressed the Yankton District Medical Society of Yankton, South Dakota, recently on the subject of "Chemotherapy."

* * *

Dr. John T. Leland, practicing physician in Herman, Minnesota, for the past thirty-seven years, has moved to Mill Valley, California, where he and Mrs. Leland expect to make their future home.

* * *

Dr. L. M. Hammar of Butterfield has opened offices in Mountain Lake, taking over the offices and equipment of Dr. P. J. Pankratz, who is now in service. Dr. Hammar will continue to make his home at Butterfield and to take care of his practice in that community as well as in Mountain Lake.

* * *

Dr. Ruth E. Boynton, director of Students Health Service, University of Minnesota, has been named to the sub-committee on Women Physicians of the Committee on Procurement and Assignment Service for physicians, dentists and veterinarians. Appointment was received from Paul V. McNutt.

* * *

Lieutenant Colonel Sam F. Seely, who has acted as Executive Officer of the National Procurement and Assignment Committee for physicans, dentists, and veterinarians, has been transferred back to active military duty. His military training and industry were of inestimable value to the Committee and the appreciation of the Committee has been expressed in an appropriate resolution.

* * *

Miss Helen H. Norris, who has been Librarian of the Hennepin County Medical Society, Minneapolis, for about thirteen years, resigned, effective September 30, to accept the position of Associate Librarian, Chief of the Division of Custody and Loans in the Army

Medical Library, Washington, D. C. She will be greatly missed by her many friends in the medical profession.

* * *

Mr. J. R. Eckman of the Mayo Clinic, who wrote the chapters on "Homeopathic and Eclectic Medicine in Minnesota," published in the section on History of Medicine in Minnesota in MINNESOTA MEDICINE in 1941, has been made a member of Phi Alpha Theta in recognition of conspicuous attainments and scholarship in the field of history. Membership was conferred by Phi Chapter, July 16, 1942.

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Lymanhurst Hospital has now been officially designated as the Elizabeth Kenny Poliomyelitis Institute and Miss Kenny's clinic is established there and will operate under its present financial setup until January 1, when the Minneapolis Welfare Board will set up a Board of Trustees to supervise finances after that time. The city heart clinic now being operated in the same building will continue there, but its budget will be kept separate from that of the Poliomyelitis Institute, according to an announcement by the Welfare Board.

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Wives and babies of soldiers and sailors in enlisted grades who are shown to be in need will be provided with obstetrical and pediatric care through a special fund provided to the State Board of Health by the Children's Bureau. Applications for this assistance will be investigated by the County Welfare Boards in the same manner as other aids to the needy. If approved, physicians giving the service will be paid direct by the State Board of Health. The fund is limited to $10,000 and existing facilities must be used first. The plan was approved by the Committee on Child Health. An initial survey showed some 411 mothers and 114 children in need of care. Applications for aid must be signed by physician and patient. Forms are available at county welfare boards or the Division of Maternal Health, State Board of Health.

* * *

Dr. Thomas Francis, Jr., chairman of the Department of Epidemiology, School of Public Health, University of Michigan, and Director of the Influenza Commission of the United States Army, gave the Clarence Martin Jackson lecture provided each year by the Phi Beta Pi medical fraternity, at the University of Minnesota, October 21, 1942.

In his lecture entitled "An Interpretation of Current Studies in the Control of Epidemic Influenza," Dr. Francis brought out the facts that influenza is a virus disease, transmitted directly through the respiratory tract and that gauze masks are useless in preventing infection. The infection destroys the ciliated columnar epithelin of the respiratory tract. Natural immunity which exists in a certain percentage of individuals is acquired during an attack and may last a few months. One may be immune to one of the two types, termed A and B, and not to the other. Subcutaneous and intramuscular injection of the living virus fails to pro-

duce the disease. The development of immunization measures is more likely to be effected through intranasal methods than by injection.

* * *

John Reginald McCarthy, son of Dr. W. R. McCarthy of Saint Paul, was recently awarded the Navy Cross, the highest award given by the Navy, for his extraordinary heroism and contribution to the success of a naval engagement.

Lieutenant (j.g.) McCarthy graduated in 1939 from the Aero-Engineering School of the University of Minnesota, was called into service in September, 1939, and obtained his commission in June, 1940. The same month he married Elizabeth Rosacker of Minneapolis and the day following the ceremony flew to the west coast where he was immediately assigned to sea duty and dive bombing in particular. On the morning of December 7, 1941, he was flying toward Pearl Harbor in company of another plane piloted by Lieutenant Clarence E. Dickinson when he was shot down. In bailing out he suffered a leg fracture but was picked up and taken to the hospital at Pearl Harbor where he spent two months. Later in the Midway battle, after shooting down two Japanese Zero planes, he ran out of gas, bailed out again, but in so doing suffered a broken nose and laceration of the scalp. Fortunately he was picked up from his rubber life boat by a destroyer and by coincidence his scalp wounds were sutured by Dr. John H. Peterson of Duluth. Soon transferred to another vessel and taken back to Pearl Harbor, he miraculously escaped the destruction of the destroyer from which only nine of the personnel were saved. Because he failed to get back to his carrier he was first reported missing. He is now in this country.

* * *

A portrait of Dr. W. H. Valentine of Tracy by Walter Scott Darr, a well-known portrait artist of New York City, was presented to the Tracy Hospital by Dr. H. F. McChesney of Brooklyn. New York, a cousin and classmate of Dr. Valentine at Carleton College in the nineties. Dr. McChesney is a native of Minnesota and took his medical training at Johns Hopkins, beginning practice in Brooklyn in 1901. Dr. Valentine obtained his medical degree at the University of Minnesota in 1900 and in May of that year began practice in Tracy. Unable to attend the presentation ceremonies Dr. McChesney wrote in a letter to the family:

"I am presenting this portrait to the Tracy Hospital in recognition of Dr. Valentine's personal worth as well as his professional ability and a life-long devotion to the people of his community and the establishment of a hospital to minister to the needs of the community—not only for the present but for many years to come. I have a very profond appreciation of the work and constructive effort Walter has expended for the good of his clientele and community.

"This hospital is really a monument and memorial for generations to come. Walter's work and devotion should live long after the present contemporary people of his community have passed on."

At the 101st Annual Meeting of the State Medical Society of Wisconsin held in Milwaukee, September 14, 15 and 16, Minnesota members of the medical profession participated in both the General Session presentations and the Round Table discussions. Those who appeared on the program were:

*General Sessions*—Arlie R. Barnes, Rochester, "Diagnosis of Pathologic Conditions of the Heart"; S. W. Harrington, Rochester, "Constricting Pericarditis"; Wesley W. Spink, Minneapolis, "The Clinical Applications and Complications of the Sulfonamides"; E. H. Rynerarson, Rochester, "Actual Clinical Disturbances of the Endocrine Glands"; E. A. Hines, Jr., Rochester, "The Range of Blood Pressure and Hereditary Factors in Normal and Hypertensive States"; E. T. Bell, Minneapolis, "The Pathology of Hypertension"; Wallace H. Cole, Saint Paul, "The Kenny Treatment of Anterior Poliomyelitis"; H. O. McPheeters, Minneapolis, "The Present-Day Treatment of Varicose Veins"; T. L. Pool, Rochester, "The Treatment of Urinary Tract Infection with the Sulfonamide Group of Drugs."

*Round Table Discussions*—Arlie R. Barnes, Rochester, "The Cardiac Problems of the General Practitioner"; Wesley W. Spink, Minneapolis, "Medical Management of Gall-bladder Disease"; E. H. Rynearson, Minneapolis, "The Practical Use of Hormones"; H. O. McPheeters, Minneapolis, "Injection of Varicose Veins"; Wallace H. Cole, Saint Paul, "Orthopedics in Children"; E. T. Bell, Minneapolis, "The Etiology of Primary Hypertension"; E. A. Hines, Jr., Rochester, "The Prevention and Treatment of Thrombosis and Embolism."

On the Wednesday morning Motion Picture Program Dr. H. O. McPheeters presented a picture on "Skin Graft."

* * *

The American Gastroenterological Association on January 1, 1943, will publish the first issue of a new journal to be called *Gastroenterology*. The new journal will be owned by the Association, will be the official publication of the Association, and will be published by Williams and Wilkins Company. It will appear monthly, and the subscription price will be $6.00 per year.

Dr. W. C. Alvarez will be the editor (after June, 1943) and Dr. A. C. Ivy will be the assistant editor. The Editorial Board will consist of Doctors A. H. Aaron (Buffalo), J. A. Bargen (Rochester), H. L. Bockus (Philadelphia), W. C. Boeck (Los Angeles), B. B. Crohn (New York), R. Elman (St. Louis), F. Hollander (New York), Sara Jordan (Boston), J. L. Kantor (New York), B. R. Kirklin (Rochester), P. Klemperer (New York), F. H. Lahey (Boston), F. C. Mann (Rochester), H. J. Moersch (Rochester), V. C. Myers (Cleveland), W. L. Palmer (Chicago), J. M. Ruffin (Durham), R. Schindler (Chicago), and D. L. Wilbur (San Francisco).

*Gastroenterology* invites for publication clinical and investigative contributions which are of interest to the general practitioner as well as the specialist and which deal with the diseases of digestion and nutrition, including their physiological, biochemical, pathological, parasitological, radiological and surgical aspects.

Manuscripts should be sent to Dr. A. C. Ivy, *Gas-*

*troenterology*, 303 East Chicago Avenue, Chicago, Illinois. Letters regarding subscriptions and business matters should be addressed to Mr. R. S. Gill, Williams and Wilkins Company, Baltimore, Maryland.

* * *

**Physicians in Service**

Minnesota physicians who have been called to active duty this month include the following:

Dr. Paul C. Benton of Gibbon is at Camp Barkeley, Texas, serving as a First Lieutenant on the Army hospital staff. His practice will be cared for during his absence by Dr. J. E. Schroeppel of Winthrop and Dr. A. L. Kusske of New Ulm.

Dr. R. V. Fait of Little Falls is at Bremerton, Washington, at the Puget Sound Naval Hospital. His practice at Little Falls will be in the hands of his associate, Dr. Douglas L. Johnson.

Dr. L. H. Heinz of Hastings has been commissioned First Lieutenant in the Medical Corps and has reported for service at the Aviation Cadet Center in San Antonio, Texas.

Dr. L. J. Monson of Hendricks has reported to the Navy Hospital at San Diego, California, for training. He is commissioned a Senior Lieutenant in the Naval Reserve.

Dr. Harry B. Neel of Albert Lea will serve as Lieutenant at the Bremerton Naval Hospital, Bremerton, Washington.

Dr. A. M. Nielsen of Northfield has reported to Mare Island, San Francisco, California, as an assistant surgeon in the Medical Corps of the U. S. Navy. He has the raink of Lieutenant, Junior Grade.

Dr. M. O. Nesholm of Emmons has been inducted as a First Lieutenant in the medical division of the U. S. Army Air Corps.

Dr. Orien B. Patch of Duluth has been commissioned as a Captain in the Army Air Force and is now on duty at the Lincoln Air Base Hospital, Lincoln, Nebraska.

Dr. Russell O. Spittler of New Richland has been called to serve as Captain in the Medical Corps of the Army and has reported for duty at Fort Sam Houston, Texas.

* * *

**Hospital News**

Dr. J. A. Cosgriff of Olivia has opened a hospital annex of several rooms to his present office. Rooms on the second floor have been remodeled and equipped for the use of patients.

* * *

Through the efforts of the American Legion Auxiliary and public contribution, a number of towns in Minnesota have received hospital equipment for use by the entire community. At Faribault a resuscitator has been purchased. Olivia has a portable fracture bed which will be used by several other towns in the vicinity including Danube, Renville, Sacred Heart, Bird Island, Hector, Buffalo Lake, Fairfax, Franklin and Morton. Oxygen tents, three in number, have been purchased for use of patients in Anoka, Cambridge and Princeton and the surrounding rural areas. At Mahtomedi a combination patrol car and ambulance will serve the community.

## BOOK REVIEWS

**Books listed here become the property of the Ramsey, Hennepin and St. Louis County Medical libraries when reviewed. Members, however, are urged to write reviews of any or every recent book which may be of interest to physicians.**

THE ESSENTIALS OF EMERGENCY TREATMENT. Compilation of a series of articles by various authors. Sponsored by Connecticut State Medical Journal. 144 pages. Price $1.00, paper; $2.00, cloth. New Haven: Connecticut State Medical Journal, 1942.

CLINICAL ANESTHESIA—A Manual of Clinical Anesthesiology. John S. Lundy, B.A., M.D. Head of Section on Anesthesia, Mayo Clinic; Professor of Anesthesia, Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota; Diplomate and Member of the American Board of Anesthesiology, Inc.; Member of the Subcommittee on Anesthesia, National Research Council. 771 pages. Illus. Price, $9.00, cloth. Philadelphia: W. B. Saunders Co., 1942.

MEDICAL PARASITOLOGY. James T. Culbertson, Asst. Professor of Bacteriology, College of Physicians and Surgeons, Columbia University. 285 pages. Illus. Price, $4.25, cloth. New York: Columbia University Press, 1942.

SULFANILAMIDE AND RELATED COMPOUNDS IN GENERAL PRACTICE. Second Edition. Wesley W. Spink, M.D., F.A.C.P. Associate Professor of Medicine, University of Minnesota Medical School. 374 pages. Price, $3.00, cloth. Chicago: Year Book Publishers, 1942.

METHODS OF TREATMENT. Logan Clendening, M.D. Clinical Professor of Medicine, Medical Department of the University of Kansas; Attending Physician, University of Kansas Hospitals, and Edward H. Hashinger, A.B., M.D. Clinical Professor of Medicine, Medical Department of the University of Kansas; Attending Physician, University of Kansas Hospitals; Attending Physician, St. Luke's Hospital, Kansas City, Mo. Seventh Edition. Pp. 997. Cloth. Price $10.00. St. Louis: The C. V. Mosby Company, 1941.

This seventh edition of Dr. Logan Clendening's Method of Treatment (first published in 1924) features the collaboration of Dr. Edward H. Hashinger. Some new sections and chapters, dealing with newer developments in chemotherapy, in deficiency states, etc., have been added. Other chapters have been entirely rewritten, and drug therapy has been brought up to date in conformity with the Eleventh Edition of the U. S. Pharmacopœia. Otherwise the treatise follows the general plan of Dr. Clendening's previous editions.

The work is essentially a comprehensive outline of accepted therapy and procedures, with succinct directions for their technical accomplishment. The illustrations of technique are simple and clear, in the same manner in which the descriptive text is direct and brief. The text is replete with numerous practical observations and suggestions gleaned from the wide experience of the authors. The book is not designed as a complete medical text; however, in the opinion of the reviewer, it serves admirably as a ready, concise and practical therapeutic reference.

PHILIP F. ECKMAN, M.D.

## ✶ CLASSIFIED ADVERTISING ✶

FOR SALE—One practically new brick office building, two stories, seven-room apartment upstairs; all insulated and modern, heated by automatic stoker; double garage in rear. Large reception room, secretary's room, large treatment and consultation room, x-ray, ultra-violet light, short-wave diathermy with cautery, 9 x 12 drug room, toilet and dark room. Building is 25 x 64 feet, located in village of over 700 with large unopposed practice in rich farming community. Good open hospital within short driving distance. Reason for selling, poor health. Address D-35, care MINNESOTA MEDICINE.

FOR RENT—Physician's office, 3801 Nicollet Avenue, Minneapolis. Three rooms, laboratory and waiting room formerly occupied by prominent physician for twelve years. S. A. Otness, 5341 Clinton Avenue, Minneapolis, Minnesota. Telephone: COlfax 7017.

* * *

FOR SALE—Los Angeles, practice, equipment. Established twenty years. Owner retiring. Address D-34, MINNESOTA MEDICINE.

* * *

FOR SALE—Physician's office equipment, instruments, et cetera. Owner in military service. Contact Miss Verna Peterson, Aitkin, Minnesota.